A Complete Bibliography of Publications in *Communications of the ACM*: 2010–2019

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254

E-mail: `beebe@math.utah.edu`, `beebe@acm.org`, `beebe@computer.org` (Internet)
WWW URL: `https://www.math.utah.edu/~beebe/`

24 April 2025
Version 1.135

Title word cross-reference

References

Vardi:2010:ELM

[1] Moshe Y. Vardi. Editor's letter: More debate, please! *Communications of the ACM*, 53(1):5, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:LES

[2] CACM Staff. Letters to the Editor: Software still as much an art as science. *Communications of the ACM*, 53(1):7, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:VEa

[3] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 53(1): 8, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hall:2010:AAR

[4] Wendy Hall. ACM's annual report. *Communications of the ACM*, 53(1):9–13, January 2010. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Linden:2010:BSE

[5] Greg Linden, Ruben Ortega, and Jason Hong. blog@CACM: Software engineering, smartphones and health systems, and security warnings. *Communications of the ACM*, 53(1):16–17, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2010:COCa

[6] David Roman. CACM online: The corollary of empowerment. *Communications of the ACM*, 53(1):18, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2010:NRE

[7] Tom Geller. News: Rebuilding for eternity. *Communications of the ACM*, 53(1):19–21, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2010:NAP

[8] Leah Hoffmann. News: Amir Pnueli: ahead of his time. *Communications of the ACM*, 53(1):22–23, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2010:NAT

[9] Gary Anthes. News: Automated translation of Indian languages. *Communications of the ACM*, 53(1):24–26, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2010:NNS

[10] Neil Savage. News: New search challenges and opportunities. *Communications of the ACM*, 53(1):27–28, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2010:NFI

[11] Kirk L. Kroeker. News: Future Internet design summit. *Communications of the ACM*, 53(1):29, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Frenkel:2010:NRL

[12] Karen A. Frenkel. News: Robert Lovett Ashenhurst: 1929–2009. *Communications of the ACM*, 53(1):30, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2010:NAI

[13] Samuel Greengard. News: ACM and India. *Communications of the ACM*, 53(1):31, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2010:VTS

[14] Michael Cusumano. Viewpoints: Technology strategy and management: The evolution of platform thinking. *Communications of the ACM*, 53(1):32–34, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2010:VBS

[15] Phillip G. Armour. Viewpoints: The business of software: In praise of bad programmers. *Communications of the ACM*, 53(1):35–36, January 2010.

CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rai:2010:VLT

[16] Arti Rai. Viewpoints: Law and technology: Unstandard standardization: the case of biology. *Communications of the ACM*, 53(1):37–39, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stroustrup:2010:VWS

[17] Bjarne Stroustrup. Viewpoint: What should we teach new software developers? Why? *Communications of the ACM*, 53(1):40–42, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Aspray:2010:VCM

[18] William Aspray, Len Shustek, and Norbert Ryska. Viewpoints: Computer museum series: Great computing museums of the world, part one. *Communications of the ACM*, 53(1):43–46, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyde:2010:DF

[19] Julian Hyde. Data in flight. *Communications of the ACM*, 53(1):48–52, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Petschulat:2010:OPD

[20] Stephen Petschulat. Other people's data. *Communications of the ACM*, 53(1):53–57, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Leventhal:2010:TPR

[21] Adam Leventhal. Triple-parity RAID and beyond. *Communications of the ACM*, 53(1):58–63, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stonebraker:2010:MPD

[22] Michael Stonebraker, Daniel Abadi, David J. DeWitt, Sam Madden, Erik Paulson, Andrew Pavlo, and Alexander Rasin. MapReduce and parallel DBMSs: friends or foes? *Communications of the ACM*, 53(1):64–71, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dean:2010:MFD

[23] Jeffrey Dean and Sanjay Ghemawat. MapReduce: a flexible data processing tool. *Communications of the ACM*, 53(1):72–77, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lin:2010:CAA

[24] Raz Lin and Sarit Kraus. Can automated agents proficiently negotiate with humans? *Communications of the ACM*, 53(1):78–88, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wallach:2010:TPN

[25] Dan Wallach. Technical perspective: Native Client: a clever alternative. *Communications of the ACM*, 53(1):90, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Yee:2010:NCS

[26] Bennet Yee, David Sehr, Gregory Dardyk, J. Bradley Chen, Robert Muth, Tavis Ormandy, Shiki Okasaka, Neha Narula, and Nicholas Fullagar. Native Client: a sandbox for portable, untrusted x86 native code. *Communications of the ACM*, 53(1):91–99, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Halevy:2010:TPS

[27] Alon Halevy. Technical perspective: Schema mappings: rules for mixing data. *Communications of the ACM*, 53(1):100, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

tenCate:2010:SCS

[28] Balder ten Cate and Phokion G. Kolaitis. Structural characterizations of schema-mapping languages. *Communications of the ACM*, 53(1):101–110, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2010:LBQa

[29] Leah Hoffmann. Last byte: Q&A: HP's running man. *Communications of the ACM*, 53(1):120–ff, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Seo:2010:UTF

[30] Dongback Seo and King-Tim Mak. Using the thread-fabric perspective to analyze industry dynamics. *Communications of the ACM*, 53(1):121–125, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Burns:2010:SCR

[31] Randal Burns and Zachary Peterson. Security constructs for regulatory-compliant storage. *Communications of the ACM*, 53(1):126–130, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hur:2010:FDI

[32] Wonchang Hur and Dongsoo Kim. The future of digital imaging. *Communications of the ACM*, 53(1):131–135, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kim:2010:MWM

[33] Seongwoon Kim, Inseong Lee, Kiho Lee, Seungki Jung, Joonah Park, Yeun Bae Kim, Sang Ryong Kim, and Jinwoo Kim. Mobile Web 2.0 with multi-display buttons. *Communications of the ACM*, 53(1):136–141, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Witman:2010:TBR

[34] Paul D. Witman and Terry Ryan. Think big for reuse. *Communications of the ACM*, 53(1):142–147, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Khatri:2010:DDG

[35] Vijay Khatri and Carol V. Brown. Designing data governance. *Communications of the ACM*, 53(1):148–152, January 2010. CODEN CACMA2. ISSN

0001-0782 (print), 1557-7317 (electronic).

Miori:2010:DTI

[36] Vittorio Miori, Dario Russo, and Massimo Aliberti. Domotic technologies incompatibility becomes user transparent. *Communications of the ACM*, 53 (1):153–157, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Drezner:2010:TOR

[37] Zvi Drezner. Technical opinion: Random selection from a stream of events. *Communications of the ACM*, 53(1): 158–159, January 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Crawford:2010:IT

[38] Diane Crawford. An issue of teamwork. *Communications of the ACM*, 53(2):5, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:VEb

[39] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 53(2):9, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Barr:2010:BCW

[40] Valerie Barr. blog@CACM: Connecting women and technology. *Communications of the ACM*, 53(2):10–11, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2010:COW

[41] David Roman. CACM online: Where the data is. *Communications of the ACM*, 53(2):12, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2010:NAI

[42] Kirk L. Kroeker. News: Alternate interface technologies emerge. *Communications of the ACM*, 53(2):13–15, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2010:NTT

[43] Alex Wright. News: Type theory comes of age. *Communications of the ACM*, 53(2):16–17, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Underwood:2010:NID

[44] Sarah Underwood. News: Improving disaster management. *Communications of the ACM*, 53(2):18–20, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:NAF

[45] CACM Staff. News: ACM Fellows honored. *Communications of the ACM*, 53(2):21, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sasse:2010:PSS

[46] M. Angela Sasse. Privacy and security: Not seeing the crime for the cameras? *Communications of the ACM*, 53(2):22–25, February 2010. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Groth:2010:EWI

[47] Dennis P. Groth and Jeffrey K. MacKie-Mason. Education: Why an informatics degree? *Communications of the ACM*, 53(2):26–28, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Maughan:2010:IRN

[48] Douglas Maughan. Inside risks: The need for a national cybersecurity research and development agenda. *Communications of the ACM*, 53(2):29–31, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Beaudouin-Lafon:2010:OAS

[49] Michel Beaudouin-Lafon. Open access to scientific publications. *Communications of the ACM*, 53(2):32–34, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2010:KVT

[50] George V. Neville-Neil. Kode vicious: Taking your network's temperature. *Communications of the ACM*, 53(2):35–36, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shasha:2010:IMR

[51] Dennis Shasha. An interview with Michael Rabin. *Communications of the ACM*, 53(2):37–42, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Saxe:2010:PES

[52] Eric Saxe. Power-efficient software. *Communications of the ACM*, 53(2): 44–48, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fedorova:2010:MCS

[53] Alexandra Fedorova, Sergey Blagodurov, and Sergey Zhuravlev. Managing contention for shared resources on multicore processors. *Communications of the ACM*, 53(2):49–57, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Miller:2010:SMC

[54] Steven P. Miller, Michael W. Whalen, and Darren D. Cofer. Software model checking takes off. *Communications of the ACM*, 53(2):58–64, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bessey:2010:FBL

[55] Al Bessey, Ken Block, Ben Chelf, Andy Chou, Bryan Fulton, Seth Hallem, Charles Henri-Gros, Asya Kamsky, Scott McPeak, and Dawson Engler. A few billion lines of code later: using static analysis to find bugs in the real world. *Communications of the ACM*, 53(2):66–75, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Benhamou:2010:ACU

[56] Eric Benhamou, Jon Eisenberg, and Randy H. Katz. Assessing the changing U.S. IT R&D ecosystem. *Communications of the ACM*, 53(2):76–83, February 2010. CODEN CACMA2. ISSN

0001-0782 (print), 1557-7317 (electronic).

Bacon:2010:RPQ

[57] Dave Bacon and Wim van Dam. Recent progress in quantum algorithms. *Communications of the ACM*, 53(2):84–93, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dasgupta:2010:SEH

[58] Sanjoy Dasgupta. Strange effects in high dimension. *Communications of the ACM*, 53(2):96, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ailon:2010:FDR

[59] Nir Ailon and Bernard Chazelle. Faster dimension reduction. *Communications of the ACM*, 53(2):97–104, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Borkar:2010:WBB

[60] Shekhar Y. Borkar. Want to be a bug buster? *Communications of the ACM*, 53(2):105, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Park:2010:PSB

[61] Sung-Boem Park and Subhasish Mitra. Post-silicon bug localization for processors using IFRA. *Communications of the ACM*, 53(2):106–113, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2010:LBPa

[62] Peter Winkler. Last byte: Puzzled: Breaking chocolate bars. *Communications of the ACM*, 53(2):120, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kim:2010:DEI

[63] Dongmin Kim and Izak Benbasat. Designs for effective implementation of trust assurances in Internet stores. *Communications of the ACM*, 53(2):121–126, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Becerra-Fernandez:2010:RLC

[64] Irma Becerra-Fernandez, Joyce Elam, and Susan Clemmons. Reversing the landslide in computer-related degree programs. *Communications of the ACM*, 53(2):127–133, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chenoweth:2010:WIE

[65] Tim Chenoweth, Robert Minch, and Sharon Tabor. Wireless insecurity: examining user security behavior on public networks. *Communications of the ACM*, 53(2):134–138, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Altaf:2010:TFA

[66] Farheen Altaf and David Schuff. Taking a flexible approach to ASPs. *Communications of the ACM*, 53(2):139–143, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ross:2010:ICR

[67] John Minor Ross. Informatics creativity: a role for abductive reasoning? *Communications of the ACM*, 53

(2):144–148, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Joseph:2010:PII

[68] Damien Joseph, Soon Ang, Roger H. L. Chang, and Sandra A. Slaughter. Practical intelligence in IT: assessing soft skills of IT professionals. *Communications of the ACM*, 53 (2):149–154, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gurbani:2010:MCO

[69] Vijay K. Gurbani, Anita Garvert, and James D. Herbsleb. Managing a corporate open source software asset. *Communications of the ACM*, 53(2): 155–159, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mehta:2010:ITT

[70] Nikhil Mehta and Anju Mehta. It takes two to tango: how relational investments improve IT outsourcing partnerships. *Communications of the ACM*, 53 (2):160–164, February 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2010:RPC

[71] Moshe Y. Vardi. Revisiting the publication culture in computing research. *Communications of the ACM*, 53(3):5, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:LET

[72] CACM Staff. Letters to the Editor: Too much debate? *Communications of the ACM*, 53(3):6–7, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:VEc

[73] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 53(3):8, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2010:BTM

[74] Mark Guzdial and Judy Robertson. BLOG@CACM: Too much programming too soon? *Communications of the ACM*, 53(3):10–11, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2010:COGa

[75] David Roman. CACM online: Granting a second life. *Communications of the ACM*, 53(3):12, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2010:NCB

[76] Gregory Goth. News: CS and biology's growing pains. *Communications of the ACM*, 53(3):13–15, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2010:NEW

[77] Kirk L. Kroeker. News: Engineering the Web's third decade. *Communications of the ACM*, 53(3):16–18, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2010:NTG

[78] Samuel Greengard. News: Tracking garbage. *Communications of the ACM*,

53(3):19–20, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:NKP

[79] CACM Staff. News: Katayanagi prizes and other CS awards. *Communications of the ACM*, 53(3):21, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chang:2010:EBD

[80] Tim Chang. Economic and business dimensions: Gaming will save us all. *Communications of the ACM*, 53(3):22–24, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2010:LSO

[81] Pamela Samuelson. Legally speaking: Only technological processes are patentable. *Communications of the ACM*, 53(3):25–27, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hollander:2010:CEE

[82] Rachelle Hollander. Computing ethics: The ethics beat. *Communications of the ACM*, 53(3):28–29, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2010:PIO

[83] Peter J. Denning, Fernando Flores, and Peter Luzmore. The profession of IT: Orchestrating coordination in pluralistic networks. *Communications of the ACM*, 53(3):30–32, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tapia:2010:BPH

[84] Richard Tapia. Broadening participation: Hiring and developing minority faculty at research universities. *Communications of the ACM*, 53(3):33–35, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wilson:2010:IPM

[85] Cameron Wilson and Peter Harsha. IT policy: Making the case for computing. *Communications of the ACM*, 53(3):36–38, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

OHara:2010:PPD

[86] Kieron O'Hara and Nigel Shadbolt. Privacy: Privacy on the data web. *Communications of the ACM*, 53 (3):39–41, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McKusick:2010:GEF

[87] Kirk McKusick and Sean Quinlan. GFS: evolution on fast-forward. *Communications of the ACM*, 53(3):42–49, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Brown:2010:TEE

[88] David J. Brown and Charles Reams. Toward energy-efficient computing. *Communications of the ACM*, 53 (3):50–58, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sia:2010:GIM

[89] Siew Kien Sia, Christina Soh, and Peter Weill. Global IT management: structuring for scale, responsiveness, and innovation. *Communications of the ACM*, 53(3):59–64, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lengauer:2010:CAV

[90] Thomas Lengauer, André Altmann, Alexander Thielen, and Rolf Kaiser. Chasing the AIDS virus. *Communications of the ACM*, 53(3):66–74, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Seay:2010:VCI

[91] Cameron Seay and Gary Tucker. Virtual computing initiative at a small public university. *Communications of the ACM*, 53(3):75–83, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Conitzer:2010:MDB

[92] Vincent Conitzer. Making decisions based on the preferences of multiple agents. *Communications of the ACM*, 53(3):84–94, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Micciancio:2010:FGC

[93] Daniele Micciancio. A first glimpse of cryptography's Holy Grail. *Communications of the ACM*, 53(3):96, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gentry:2010:CAF

[94] Craig Gentry. Computing arbitrary functions of encrypted data. *Communications of the ACM*, 53(3):97–105, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Perona:2010:STF

[95] Pietro Perona. Seeing the trees, the forest, and much more. *Communications of the ACM*, 53(3):106, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Torralba:2010:UFS

[96] A. Torralba, K. P. Murphy, and W. T. Freeman. Using the forest to see the trees: exploiting context for visual object detection and localization. *Communications of the ACM*, 53(3):107–114, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2010:LBPb

[97] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 53(3):118, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Juels:2010:LBF

[98] Ari Juels. Last byte: Future tense: The primal cue. *Communications of the ACM*, 53(3):120–ff, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Arduini:2010:BCB

[99] Fabio Arduini and Vincenzo Morabito. Business continuity and the banking in-

dustry. *Communications of the ACM*, 53(3):121–125, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cannoy:2010:FHC

[100] Sherrie Drye Cannoy and A. F. Salam. A framework for health care information assurance policy and compliance. *Communications of the ACM*, 53(3):126–131, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lin:2010:SPE

[101] Lin Lin, Paul Jen-Hwa Hu, Olivia R. Liu Sheng, and Johnny Lee. Is stickiness profitable for electronic retailers? *Communications of the ACM*, 53(3):132–136, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Subramanyam:2010:UPS

[102] Ramanath Subramanyam, Fei Lee Weisstein, and M. S. Krishnan. User participation in software development projects. *Communications of the ACM*, 53(3):137–141, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Parkinson:2010:PBM

[103] S. T. Parkinson, R. M. Hierons, M. Lycett, and M. Norman. Practitioner-based measurement: a collaborative approach. *Communications of the ACM*, 53(3):142–147, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Nagy:2010:OAO

[104] Del Nagy, Areej M. Yassin, and Anol Bhattacherjee. Organizational adoption of open source software: barriers and remedies. *Communications of the ACM*, 53(3):148–151, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Benamati:2010:AUC

[105] John H. Benamati, Zafer D. Ozdemir, and H. Jeff Smith. Aligning undergraduate IS curricula with industry needs. *Communications of the ACM*, 53(3):152–156, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chan:2010:AOE

[106] Hing Kai Chan. Agent-oriented embedded electronic measuring systems. *Communications of the ACM*, 53(3): 157–162, March 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gotlieb:2010:WAA

[107] Calvin Gotlieb and James Horning. The work of ACM's awards committee. *Communications of the ACM*, 53(4):5, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:LECa

[108] CACM Staff. Letters to the Editor: Computing paradigm not a branch of science. *Communications of the ACM*, 53(4):6–7, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:VEd

[109] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 53(4):8, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stonebraker:2010:BSDa

[110] Michael Stonebraker. BLOG@CACM: SQL databases v. NoSQL databases. *Communications of the ACM*, 53(4): 10–11, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2010:COGb

[111] David Roman. CACM online: Going mobile. *Communications of the ACM*, 53(4):12, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2010:NDS

[112] Alex Wright. News: Data streaming 2.0. *Communications of the ACM*, 53(4):13–14, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2010:NRG

[113] Gary Anthes. News: Robots gear up for disaster response. *Communications of the ACM*, 53(4):15–16, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2010:NSA

[114] Samuel Greengard. News: Spies among us? *Communications of the ACM*, 53(4):17–19, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Heeks:2010:EMD

[115] Richard Heeks. Emerging markets: Development 2.0: the IT-enabled transformation of international development. *Communications of the ACM*, 53(4):22–24, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Campbell-Kelly:2010:HRC

[116] Martin Campbell-Kelly. Historical reflection: Be careful what you wish for. *Communications of the ACM*, 53(4):25–26, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2010:TSM

[117] Michael Cusumano. Technology strategy and management: Cloud computing and SaaS as new computing platforms. *Communications of the ACM*, 53(4):27–29, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ohm:2010:VWN

[118] Paul Ohm. Viewpoint: When network neutrality met privacy. *Communications of the ACM*, 53(4):30–32, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2010:KVD

[119] George V. Neville-Neil. Kode vicious: The data-structure canon. *Communications of the ACM*, 53(4):33–34, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Woods:2010:CDC

[120] Andy Woods. Cooling the data center. *Communications of the ACM*, 53(4):36–42, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Creeger:2010:CRM

[121] Mache Creeger. CTO roundtable: malware defense. *Communications of the ACM*, 53(4):43–49, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armbrust:2010:VCC

[122] Michael Armbrust, Armando Fox, Rean Griffith, Anthony D. Joseph, Randy Katz, Andy Konwinski, Gunho Lee, David Patterson, Ariel Rabkin, Ion Stoica, and Matei Zaharia. A view of cloud computing. *Communications of the ACM*, 53(4):50–58, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ranganathan:2010:REP

[123] Parthasarathy Ranganathan. Recipe for efficiency: principles of power-aware computing. *Communications of the ACM*, 53(4):60–67, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Yekhanin:2010:PIR

[124] Sergey Yekhanin. Private information retrieval. *Communications of the ACM*, 53(4):68–73, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Antoy:2010:FLP

[125] Sergio Antoy and Michael Hanus. Functional logic programming. *Communications of the ACM*, 53(4):74–85, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Smyth:2010:TPC

[126] Padhraic Smyth and Charles Elkan. Technical perspective: Creativity helps influence prediction precision. *Communications of the ACM*, 53(4):88, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Koren:2010:CFT

[127] Yehuda Koren. Collaborative filtering with temporal dynamics. *Communications of the ACM*, 53(4):89–97, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kaelbling:2010:TPN

[128] Leslie Pack Kaelbling. Technical perspective new bar set for intelligent vehicles. *Communications of the ACM*, 53(4):98, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Thrun:2010:TRC

[129] Sebastian Thrun. Toward robotic cars. *Communications of the ACM*, 53(4):99–106, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2010:LBQb

[130] Leah Hoffmann. Last byte: Q&A: Systematic thinking: Andrew S. Tanenbaum talks about MINIX, microker-

nels, and electronic voting systems. *Communications of the ACM*, 53(4): 112–ff, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Poon:2010:CFS

[131] Pak-Lok Poon, Sau-Fun Tang, T. H. Tse, and T. Y. Chen. CHOC'LATE: a framework for specification-based testing. *Communications of the ACM*, 53(4):113–118, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Aalberts:2010:TTI

[132] Robert J. Aalberts, Percy S. Poon, and Paul D. Thistle. A tale of two Internet service providers. *Communications of the ACM*, 53(4):119–123, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2010:CPC

[133] Keith Wright. Capstone programming courses considered harmful. *Communications of the ACM*, 53(4):124–127, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rebbapragada:2010:DMR

[134] Surya Rebbapragada, Amit Basu, and John Semple. Data mining and revenue management methodologies in college admissions. *Communications of the ACM*, 53(4):128–133, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gregg:2010:DCI

[135] Dawn G. Gregg. Designing for collective intelligence. *Communications of the ACM*, 53(4):134–138, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ferretti:2010:WRB

[136] Stefano Ferretti, Marco Furini, Claudio E. Palazzi, Marco Roccetti, and Paola Salomoni. WWW recycling for a better world. *Communications of the ACM*, 53(4):139–143, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Joseph:2010:IRI

[137] Rhoda C. Joseph. Individual resistance to IT innovations. *Communications of the ACM*, 53(4):144–146, April 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2010:GOS

[138] Moshe Y. Vardi. *Globalization and Offshoring of Software* revisited. *Communications of the ACM*, 53(5):5, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:LER

[139] CACM Staff. Letters to the Editor: Roots of publication delay. *Communications of the ACM*, 53(5):6–7, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:VEe

[140] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 53(5):8, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wing:2010:BNF

[141] Jeannette M. Wing and Daniel Reed. BLOG@CACM: NSF funding advice: 21st century innovation. *Communications of the ACM*, 53(5):10–11, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2010:COL

[142] David Roman. CACM online: Looking for control. *Communications of the ACM*, 53(5):12, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kanipe:2010:NMA

[143] Jeff Kanipe. News: Modeling the astronomical. *Communications of the ACM*, 53(5):13–15, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2010:NHB

[144] Gary Anthes. News: Happy birthday, RDBMS! *Communications of the ACM*, 53(5):16–17, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2010:NCC

[145] Samuel Greengard. News: Cloud computing and developing nations. *Communications of the ACM*, 53(5):18–20, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosenberger:2010:NTW

[146] Jack Rosenberger. News: Thacker wins Turing Award. *Communications of the ACM*, 53(5):21, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:AGE

[147] CACM Staff. ACM's 2010 general election. *Communications of the ACM*, 53(5):23–31, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Brynjolfsson:2010:EBD

[148] Erik Brynjolfsson, Paul Hofmann, and John Jordan. Economic and business dimensions: Cloud computing and electricity: beyond the utility model. *Communications of the ACM*, 53(5):32–34, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wilson:2010:EHM

[149] Cameron Wilson and Mark Guzdial. Education: How to make progress in computing education. *Communications of the ACM*, 53(5):35–37, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Beck:2010:VCI

[150] Roman Beck. Viewpoint: Can IT lean against the wind? *Communications of the ACM*, 53(5):38–40, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Turel:2010:VME

[151] Ofir Turel and Alexander Serenko. Viewpoint: Is mobile email addiction overlooked? *Communications of the ACM*, 53(5):41–43, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Aspray:2010:CMS

[152] William Aspray. Computer museum series: Great computing museums of the world, part two. *Communications of the ACM*, 53(5):45–49, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Phillips:2010:EDT

[153] Peter Phillips. Enhanced debugging with traces. *Communications of the ACM*, 53(5):50–53, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ridoux:2010:PRT

[154] Julien Ridoux and Darryl Veitch. Principles of robust timing over the Internet. *Communications of the ACM*, 53(5):54–61, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Durkee:2010:WCC

[155] Dave Durkee. Why cloud computing will never be free. *Communications of the ACM*, 53(5):62–69, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sellen:2010:BTC

[156] Abigail J. Sellen and Steve Whittaker. Beyond total capture: a constructive critique of lifelogging. *Communications of the ACM*, 53(5):70–77, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lewis:2010:SFA

[157] Clayton Lewis, Michele H. Jackson, and William M. Waite. Student and faculty attitudes and beliefs about computer science. *Communications of the ACM*, 53(5):78–85, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Albers:2010:EEA

[158] Susanne Albers. Energy-efficient algorithms. *Communications of the ACM*, 53(5):86–96, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bartlett:2010:LAU

[159] Peter L. Bartlett. Learning to act in uncertain environments: technical perspective. *Communications of the ACM*, 53(5):98, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ganchev:2010:CED

[160] Kuzman Ganchev, Yuriy Nevmyvaka, Michael Kearns, and Jennifer Wortman Vaughan. Censored exploration and the dark pool problem. *Communications of the ACM*, 53(5):99–107, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Harman:2010:APT

[161] Mark Harman. Automated patching techniques: the fix is in: technical perspective. *Communications of the ACM*, 53(5):108, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Weimer:2010:APR

[162] Westley Weimer, Stephanie Forrest, Claire Le Goues, and ThanhVu Nguyen. Automatic program repair with evolutionary computation. *Communications of the ACM*, 53(5):109–

116, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2010:LBPc

[163] Peter Winkler. Last byte: Puzzled: Variations on the Ham Sandwich Theorem. *Communications of the ACM*, 53(5):120, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tallon:2010:UDI

[164] Paul P. Tallon. Understanding the dynamics of information management costs. *Communications of the ACM*, 53(5):121–125, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Reich:2010:REI

[165] Blaize Horner Reich and Chris Sauer. Roles of the external IT project manager. *Communications of the ACM*, 53(5):126–129, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hwang:2010:NPR

[166] Wonil Hwang and Gavriel Salvendy. Number of people required for usability evaluation: the 10 ± 2 rule. *Communications of the ACM*, 53(5):130–133, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Downing:2010:WBS

[167] Charles E. Downing. Is Web-based supply chain integration right for your company? *Communications of the ACM*, 53(5):134–137, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wang:2010:MAA

[168] Demin Wang, Dharma P. Agrawal, Wassana Toruksa, Chaichana Chaiwatpongsakorn, Mingming Lu, and Tim C. Keener. Monitoring ambient air quality with carbon monoxide sensor-based wireless network. *Communications of the ACM*, 53(5):138–141, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stratopoulos:2010:IIP

[169] Theophanis C. Stratopoulos and Jee-Hae Lim. IT innovation persistence: an oxymoron? *Communications of the ACM*, 53(5):142–146, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wilson:2010:RHI

[170] E. Vance Wilson and Bengisu Tulu. The rise of a health-IT academic focus. *Communications of the ACM*, 53(5):147–150, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kim:2010:RIB

[171] Hyeyoung Kim, Jae-Nam Lee, and Jaemin Han. The role of IT in business ecosystems. *Communications of the ACM*, 53(5):151–156, May 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ryan:2010:TAH

[172] Patricia Ryan. A tour of ACM's HQ. *Communications of the ACM*, 53(6):5, June 2010. CODEN CACMA2. ISSN

0001-0782 (print), 1557-7317 (electronic).

Staff:2010:WTD

[173] CACM Staff. Workflow tools for distributed teams? *Communications of the ACM*, 53(6):6–7, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:VEf

[174] CACM Staff. In the virtual extension. *Communications of the ACM*, 53(6):8, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Linden:2010:CIE

[175] Greg Linden, Ed H. Chi, and Mark Guzdial. The chaos of the Internet as an external brain; and more. *Communications of the ACM*, 53(6):10–11, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2010:COI

[176] David Roman. CACM online: Interact naturally. *Communications of the ACM*, 53(6):12, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2010:NSH

[177] Neil Savage. News: Straightening out heavy tails. *Communications of the ACM*, 53(6):13–15, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2010:NBS

[178] Tom Geller. News: Beyond the Smart Grid. *Communications of the ACM*, 53(6):16–17, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2010:NMY

[179] Leah Hoffmann. News: Mine your business. *Communications of the ACM*, 53(6):18–19, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2010:NRM

[180] Leah Hoffmann. News: Robin Milner: the elegant pragmatist. *Communications of the ACM*, 53(6):20–21, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosenberger:2010:NCT

[181] Jack Rosenberger. News: CS and technology leaders honored. *Communications of the ACM*, 53(6):22, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Narayanan:2010:PSM

[182] Arvind Narayanan and Vitaly Shmatikov. Privacy and security: Myths and fallacies of 'personally identifiable information'. *Communications of the ACM*, 53(6):24–26, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shapiro:2010:IRP

[183] Stuart S. Shapiro. Inside risks: Privacy by design: moving from art to practice. *Communications of the ACM*, 53(6):27–29, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2010:PIR

[184] Peter J. Denning and Jack B. Dennis. The profession of IT: The resurgence of parallelism. *Communications of the ACM*, 53(6):30–32, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2010:KVPa

[185] George V. Neville-Neil. Kode vicious: Plotting away. *Communications of the ACM*, 53(6):33–34, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Leveque:2010:LTI

[186] François Lévêque. Law and technology: Intel's rebates: above board or below the belt? *Communications of the ACM*, 53(6):35–37, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Garfinkel:2010:VIR

[187] Simson L. Garfinkel and Lorrie Faith Cranor. Viewpoint: Institutional review boards and your research. *Communications of the ACM*, 53(6):38–40, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shustek:2010:IIE

[188] Len Shustek. Interview: An interview with Ed Feigenbaum. *Communications of the ACM*, 53(6):41–45, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Owens:2010:SEC

[189] Dustin Owens. Securing elasticity in the cloud. *Communications of the ACM*, 53(6):46–51, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Phillips:2010:SB

[190] George Phillips. Simplicity betrayed. *Communications of the ACM*, 53(6): 52–58, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Heer:2010:TTV

[191] Jeffrey Heer, Michael Bostock, and Vadim Ogievetsky. A tour through the visualization zoo. *Communications of the ACM*, 53(6):59–67, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ailamaki:2010:MSD

[192] Anastasia Ailamaki, Verena Kantere, and Debabrata Dash. Managing scientific data. *Communications of the ACM*, 53(6):68–78, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chen:2010:CPS

[193] Jilin Chen and Joseph A. Konstan. Conference paper selectivity and impact. *Communications of the ACM*, 53(6):79–83, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Grauman:2010:ESS

[194] Kristen Grauman. Efficiently searching for similar images. *Communications of the ACM*, 53(6):84–94, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sarkar:2010:BCM

[195] Vivek Sarkar. Building confidence in multicore software. *Communications of the ACM*, 53(6):96, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Burnim:2010:ACD

[196] Jacob Burnim and Koushik Sen. Asserting and checking determinism for multithreaded programs. *Communications of the ACM*, 53(6):97–105, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Leino:2010:LDP

[197] K. Rustan M. Leino. Learning to do program verification. *Communications of the ACM*, 53(6):106, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Klein:2010:SFV

[198] Gerwin Klein, June Andronick, Kevin Elphinstone, Gernot Heiser, David Cock, Philip Derrin, Dhammika Elkaduwe, Kai Engelhardt, Rafal Kolanski, Michael Norrish, Thomas Sewell, Harvey Tuch, and Simon Winwood. seL4: formal verification of an operating-system kernel. *Communications of the ACM*, 53(6):107–115, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2010:LBPd

[199] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 53(6):118, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Brin:2010:LBF

[200] David Brin. Last byte: Future tense: How the Net ensures our cosmic survival. *Communications of the ACM*, 53(6):120, 119, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sun:2010:BCS

[201] Jun Sun and Marshall Scott Poole. Beyond connection: situated wireless communities. *Communications of the ACM*, 53(6):121–125, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

deCesare:2010:EPA

[202] Sergio de Cesare, Mark Lycett, Robert D. Macredie, Chaitali Patel, and Ray Paul. Examining perceptions of agility in software development practice. *Communications of the ACM*, 53(6):126–130, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Nill:2010:FIS

[203] Alexander Nill, John Schibrowsky, and James W. Peltier. Factors that influence software piracy: a view from Germany. *Communications of the ACM*, 53(6):131–134, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kietzmann:2010:PR

[204] Jan Kietzmann and Ian Angell. Panopticon revisited. *Communications of the ACM*, 53(6):135–138, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Baudry:2010:BSM

[205] Benoit Baudry, Sudipto Ghosh, Franck Fleurey, Robert France, Yves Le Traon, and Jean-Marie Mottu. Barriers to systematic model transformation testing. *Communications of the ACM*, 53(6):139–143, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gallagher:2010:RVS

[206] Kevin P. Gallagher, Kate M. Kaiser, Judith C. Simon, Cynthia M. Beath, and Tim Goles. The requisite variety of skills for IT professionals. *Communications of the ACM*, 53(6):144–148, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vannoy:2010:SIM

[207] Sandra A. Vannoy and Prashant Palvia. The social influence model of technology adoption. *Communications of the ACM*, 53(6):149–153, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rhee:2010:MM

[208] Cheul Rhee, G. Lawrence Sanders, and Natalie C. Simpson. I, myself and e-myself. *Communications of the ACM*, 53(6):154–157, June 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2010:H

[209] Moshe Y. Vardi. Hypercriticality. *Communications of the ACM*, 53(7):5, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:LED

[210] CACM Staff. Letters to the Editor: Don't ignore security offshore, or in the cloud. *Communications of the ACM*, 53(7):6–7, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:VEg

[211] CACM Staff. In the virtual extension. *Communications of the ACM*, 53(7):9, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ortega:2010:BSD

[212] Ruben Ortega, Mark Guzdial, and Daniel Reed. BLOG@CACM: Software development and crunch time; and more. *Communications of the ACM*, 53(7):10–11, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2010:COCb

[213] David Roman. CACM online: In case you missed it. *Communications of the ACM*, 53(7):12, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lindley:2010:NSC

[214] David Lindley. News: Sharing computational perspectives. *Communications of the ACM*, 53(7):13–15, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2010:NC

[215] Samuel Greengard. News: Censored! *Communications of the ACM*, 53(7): 16–18, July 2010. CODEN CACMA2.

ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2010:NMA

[216] Kirk L. Kroeker. News: Mainstreaming augmented reality. *Communications of the ACM*, 53(7):19–21, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2010:NCS

[217] Gary Anthes. News: Committed to success. *Communications of the ACM*, 53(7):22–23, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2010:NEB

[218] Gregory Goth. News: Eric Brewer: change agent. *Communications of the ACM*, 53(7):24, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Underwood:2010:NVF

[219] Sarah Underwood. News: Visions of the future. *Communications of the ACM*, 53(7):25, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sako:2010:OVS

[220] Mari Sako. Outsourcing versus shared services. *Communications of the ACM*, 53(7):27–29, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Borenstein:2010:CEW

[221] Jason Borenstein. Computing ethics: Work life in the robotic age. *Communications of the ACM*, 53(7):30–31, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2010:LSS

[222] Pamela Samuelson. Legally speaking: Should the Google book settlement be approved? *Communications of the ACM*, 53(7):32–34, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Taylor:2010:BPC

[223] Valerie E. Taylor. Broadening participation: Cultivating cultural diversity in information technology. *Communications of the ACM*, 53(7):35–36, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Genova:2010:VCS

[224] Gonzalo Génova. Viewpoint: Is computer science truly scientific? *Communications of the ACM*, 53(7):37–39, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Snir:2010:DMA

[225] Marc Snir and Telle Whitney. Distinguished members: Advice to members seeking ACM distinction. *Communications of the ACM*, 53(7):40–41, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Loh:2010:IHP

[226] Eugene Loh. The ideal HPC programming language. *Communications of the ACM*, 53(7):42–47, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gregg:2010:VSL

[227] Brendan Gregg. Visualizing system latency. *Communications of the ACM*, 53(7):48–54, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kamp:2010:YDI

[228] Poul-Henning Kamp. You're doing it wrong. *Communications of the ACM*, 53(7):55–59, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lewandowski:2010:CUC

[229] Gary Lewandowski, Dennis J. Bouvier, Tzu-Yi Chen, Robert McCartney, Kate Sanders, Beth Simon, and Tammy VanDeGrift. Commonsense understanding of concurrency: computing students and concert tickets. *Communications of the ACM*, 53(7):60–70, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Igarashi:2010:CGA

[230] Takeo Igarashi. Computer graphics for all. *Communications of the ACM*, 53(7):71–77, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roughgarden:2010:AGT

[231] Tim Roughgarden. Algorithmic game theory. *Communications of the ACM*, 53(7):78–86, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Boehm:2010:SFX

[232] Hans-J. Boehm. A solid foundation for x86 shared memory: technical perspective. *Communications of the ACM*, 53(7):88, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sewell:2010:XTR

[233] Peter Sewell, Susmit Sarkar, Scott Owens, Francesco Zappa Nardelli, and Magnus O. Myreen. x86-TSO: a rigorous and usable programmer's model for x86 multiprocessors. *Communications of the ACM*, 53(7):89–97, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Irwin:2010:TSR

[234] Mary Jane Irwin. Technology scaling redirects main memories: technical perspective. *Communications of the ACM*, 53(7):98, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lee:2010:PCM

[235] Benjamin C. Lee, Engin Ipek, Onur Mutlu, and Doug Burger. Phase change memory architecture and the quest for scalability. *Communications of the ACM*, 53(7):99–106, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2010:LBQc

[236] Leah Hoffmann. Last byte: Q&A: From single core to multicore. *Communications of the ACM*, 53(7):112, 111, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Yao:2010:ASP

[237] Yurong Yao, Edward Watson, and Beverly K. Kahn. Application service

providers: market and adoption decisions. *Communications of the ACM*, 53(7):113–117, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Romero:2010:EDP

[238] Jorge A. Romero, Nirup Menon, Rajiv D. Banker, and Mark Anderson. ERP: drilling for profit in the oil and gas industry. *Communications of the ACM*, 53(7):118–121, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chang:2010:CEE

[239] Wei-Lun Chang, Soe-Tsyr Yuan, and Carol W. Hsu. Creating the experience economy in e-commerce. *Communications of the ACM*, 53(7):122–127, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Nov:2010:WDP

[240] Oded Nov and Chen Ye. Why do people tag?: motivations for photo tagging. *Communications of the ACM*, 53(7):128–131, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Talia:2010:HDD

[241] Domenico Talia and Paolo Trunfio. How distributed data mining tasks can thrive as knowledge services. *Communications of the ACM*, 53(7):132–137, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dennis:2010:IPH

[242] Alan R. Dennis, Thomas M. Duffy, and Hasan Cakir. IT programs in high schools: lessons from the Cisco Networking Academy program. *Communications of the ACM*, 53(7):138–141, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ruhnka:2010:UED

[243] John C. Ruhnka and John W. Bagby. Using ESI discovery teams to manage electronic data discovery. *Communications of the ACM*, 53(7):142–144, July 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vianu:2010:JSN

[244] Victor Vianu. *JACM* at the start of a new decade. *Communications of the ACM*, 53(8):5, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:VEh

[245] CACM Staff. In the virtual extension. *Communications of the ACM*, 53(8):6, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:LECb

[246] CACM Staff. Letters to the Editor: CS expertise for institutional review boards. *Communications of the ACM*, 53(8):7, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Linden:2010:BWA

[247] Greg Linden, Michael Bernstein, and Erika Shehan Poole. BLOG@CACM: The war against spam: and more. *Communications of the ACM*, 53(8):8–9, August 2010. CODEN CACMA2.

ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/blogs/blog-cacm.

Roman:2010:COPa

[248] David Roman. CACM online: Print is not just ink anymore. *Communications of the ACM*, 53(8):10, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2010:NMD

[249] Gary Anthes. News: Mechanism design meets computer science. *Communications of the ACM*, 53(8):11–13, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2010:NLB

[250] Kirk L. Kroeker. News: Looking beyond stereoscopic 3D's revival. *Communications of the ACM*, 53(8):14–16, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Underwood:2010:NMS

[251] Sarah Underwood. News: Making sense of real-time behavior. *Communications of the ACM*, 53(8):17–18, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2010:NCL

[252] Kirk L. Kroeker. News: Celebrating the legacy of PLATO. *Communications of the ACM*, 53(8):19–20, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosenberger:2010:NGP

[253] Jack Rosenberger. News: Gödel Prize and other CS awards. *Communications of the ACM*, 53(8):21, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Yoo:2010:IMM

[254] Christopher S. Yoo. Is the Internet a maturing market? *Communications of the ACM*, 53(8):24–26, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Touretzky:2010:PCS

[255] David S. Touretzky. Preparing computer science students for the robotics revolution. *Communications of the ACM*, 53(8):27–29, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gao:2010:CCI

[256] Ping Gao and Jiang Yu. Has China caught up in IT? *Communications of the ACM*, 53(8):30–32, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2010:KVPb

[257] George V. Neville-Neil. Kode vicious: Presenting your project. *Communications of the ACM*, 53(8):33–34, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Spafford:2010:PSR

[258] Eugene H. Spafford. Privacy and security: Remembrances of things pest. *Communications of the ACM*, 53(8):35–37, August 2010. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chopra:2010:RAA

[259] Samir Chopra. Rights for autonomous artificial agents? *Communications of the ACM*, 53(8):38–40, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Misa:2010:IEW

[260] Thomas J. Misa. An interview with Edsger W. Dijkstra. *Communications of the ACM*, 53(8):41–47, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

DeLine:2010:SDC

[261] Robert DeLine, Gina Venolia, and Kael Rowan. Software development with code maps. *Communications of the ACM*, 53(8):48–54, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Creeger:2010:MEC

[262] Mache Creeger. Moving to the edge: a CTO roundtable on network virtualization. *Communications of the ACM*, 53(8):55–62, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Damsgaard:2010:SPS

[263] Jan Damsgaard and Jan Karlsbjerg. Seven principles for selecting software packages. *Communications of the ACM*, 53(8):63–71, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Larus:2010:SS

[264] James Larus and Galen Hunt. The Singularity system. *Communications of the ACM*, 53(8):72–79, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Szabo:2010:PPO

[265] Gabor Szabo and Bernardo A. Huberman. Predicting the popularity of online content. *Communications of the ACM*, 53(8):80–88, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Adve:2010:MMC

[266] Sarita V. Adve and Hans-J. Boehm. Memory models: a case for rethinking parallel languages and hardware. *Communications of the ACM*, 53(8):90–101, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wang:2010:ATW

[267] Helen Wang. Attacks target Web server logic and prey on XCS weaknesses: technical perspective. *Communications of the ACM*, 53(8):104, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bojinov:2010:ECC

[268] Hristo Bojinov, Elie Bursztein, and Dan Boneh. The emergence of cross channel scripting. *Communications of the ACM*, 53(8):105–113, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Henglein:2010:LSS

[269] Fritz Henglein. Large-scale sound and precise program analysis: technical perspective. *Communications of the ACM*, 53(8):114, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dillig:2010:RAU

[270] Isil Dillig, Thomas Dillig, and Alex Aiken. Reasoning about the unknown in static analysis. *Communications of the ACM*, 53(8):115–123, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2010:LBPe

[271] Peter Winkler. Last byte: Puzzled: Figures on a plane. *Communications of the ACM*, 53(8):128, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tung:2010:ISM

[272] Wei-Fung Tung and Soe-Tsyr Yuan. Intelligent service machine. *Communications of the ACM*, 53(8):129–134, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Haines:2010:HSO

[273] Marc N. Haines and Marcus A. Rothenberger. How a service-oriented architecture may change the software development process. *Communications of the ACM*, 53(8):135–140, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tisselli:2010:TCS

[274] Eugenio Tisselli. thinkflickrthink: a case study on strategic tagging. *Communications of the ACM*, 53(8):141–145, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Prechelt:2010:PTO

[275] Lutz Prechelt. Plat_Forms: is there one best Web development technology? *Communications of the ACM*, 53(8):146–149, August 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2010:SOT

[276] Moshe Y. Vardi. Science has only two legs. *Communications of the ACM*, 53(9):5, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:LEM

[277] CACM Staff. Letters to the Editor: More than one way to annotate metadata. *Communications of the ACM*, 53(9):7, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chi:2010:BEC

[278] Ed H. Chi and Ruben Ortega. BLOG@CACM: Expanding CS education; improving software development. *Communications of the ACM*, 53(9):8–9, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/blogs/blog-cacm/82365`.

Roman:2010:COMa

[279] David Roman. CACM online: More *Communications*. *Communications of the ACM*, 53(9):12, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lindley:2010:NBB

[280] David Lindley. News: Brains and bytes. *Communications of the ACM*, 53(9):13–15, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2010:OCA

[281] Samuel Greengard. Obituary: Carl Adam Petri, 1926–2010. *Communications of the ACM*, 53(9):14, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Scott:2010:SNP

[282] Phil Scott. Security: New passwords approach. *Communications of the ACM*, 53(9):15, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2010:NCT

[283] Neil Savage. News: Cycling through data. *Communications of the ACM*, 53 (9):16–17, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Krakovsky:2010:NDD

[284] Marina Krakovsky. News: Degrees, distance, and dollars. *Communications of the ACM*, 53(9):18–19, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2010:NAC

[285] Tom Geller. News: ACM China nearing launch. *Communications of the ACM*, 53(9):20, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosenberger:2010:NKP

[286] Jack Rosenberger. News: Kyoto prize and other CS awards. *Communications of the ACM*, 53(9):21, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2010:BSR

[287] Phillip G. Armour. The business of software: Return at risk. *Communications of the ACM*, 53(9):23–25, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hillman:2010:LTP

[288] Robert A. Hillman and Maureen A. O'Rourke. Law and technology: Principles of the law of software contracts. *Communications of the ACM*, 53(9):26–28, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2010:PID

[289] Peter J. Denning and Dorothy E. Denning. The profession of IT: Discussing cyber attack. *Communications of the ACM*, 53(9):29–31, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ben-Ari:2010:VON

[290] Mordechai Ben-Ari. Viewpoint: Objects never?: well, hardly ever! *Com-*

munications of the ACM, 53(9):32–35, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rexford:2010:PCF

[291] Jennifer Rexford and Constantine Dovrolis. Point/counterpoint: Future Internet architecture: clean-slate versus evolutionary research. *Communications of the ACM*, 53(9):36–40, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cantrill:2010:CPC

[292] Stephen V. Cantrill. Computers in patient care: the promise and the challenge. *Communications of the ACM*, 53(9):42–47, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chessin:2010:IEF

[293] Steve Chessin. Injecting errors for fun and profit. *Communications of the ACM*, 53(9):48–54, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Millsap:2010:TCAa

[294] Cary Millsap. Thinking clearly about performance, part 1. *Communications of the ACM*, 53(9):55–60, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sjoberg:2010:CMR

[295] Dag I. K. Sjøberg. Confronting the myth of rapid obsolescence in computing research. *Communications of the ACM*, 53(9):62–67, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armstrong:2010:E

[296] Joe Armstrong. Erlang. *Communications of the ACM*, 53(9):68–75, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Baier:2010:PEM

[297] Christel Baier, Boudewijn R. Haverkort, Holger Hermanns, and Joost-Pieter Katoen. Performance evaluation and model checking join forces. *Communications of the ACM*, 53(9):76–85, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gehrke:2010:PDP

[298] Johannes Gehrke. Programming with differential privacy: technical perspective. *Communications of the ACM*, 53(9):88, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McSherry:2010:PIQ

[299] Frank McSherry. Privacy integrated queries: an extensible platform for privacy-preserving data analysis. *Communications of the ACM*, 53(9):89–97, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jerrum:2010:CSP

[300] Mark Jerrum. Constraint satisfaction problems and computational complexity: technical perspective. *Communications of the ACM*, 53(9):98, September

2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bulatov:2010:CSP

[301] Andrei A. Bulatov and Dániel Marx. Constraint satisfaction problems and global cardinality constraints. *Communications of the ACM*, 53(9):99–106, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2010:LBPf

[302] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 53(9):110, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bear:2010:LBF

[303] Greg Bear. Last byte: Future tense: Little brother is watching. *Communications of the ACM*, 53(9):112–ff, September 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chesnais:2010:ABV

[304] Alain Chesnais. ACM is built on volunteers' shoulders. *Communications of the ACM*, 53(10):5, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:LEHa

[305] CACM Staff. Letters to the Editor: How to celebrate Codd's RDBMS vision. *Communications of the ACM*, 53(10):7, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stonebraker:2010:BSDb

[306] Michael Stonebraker. BLOG@CACM: In search of database consistency. *Communications of the ACM*, 53(10):8–9, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2010:COMb

[307] David Roman. CACM online: The mobile road ahead. *Communications of the ACM*, 53(10):10, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2010:NLL

[308] Alex Wright. News: Linear logic. *Communications of the ACM*, 53(10):11–13, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stemp-Morlock:2010:NPF

[309] Graeme Stemp-Morlock. News: Personal fabrication. *Communications of the ACM*, 53(10):14–15, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McCafferty:2010:NSC

[310] Dennis McCafferty. News: Should code be released? *Communications of the ACM*, 53(10):16–17, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Campbell-Kelly:2010:VDP

[311] Martin Campbell-Kelly. Victorian data processing. *Communications of the ACM*, 53(10):19–21, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2010:PSU

[312] Michael A. Cusumano. Platforms and services: understanding the resurgence of Apple. *Communications of the ACM*, 53(10):22–24, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Parnas:2010:IRR

[313] David L. Parnas. Inside risks: Risks of undisciplined development. *Communications of the ACM*, 53(10):25–27, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2010:KVV

[314] George V. Neville-Neil. Kode vicious: Version aversion. *Communications of the ACM*, 53(10):28–29, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hicks:2010:VSA

[315] Michael Hicks and Jeffrey S. Foster. Viewpoint: SCORE: agile research group management. *Communications of the ACM*, 53(10):30–31, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Study:2010:PSK

[316] ACM Case Study. Photoshop scalability: keeping it simple. *Communications of the ACM*, 53(10):32–38, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Millsap:2010:TCAb

[317] Cary Millsap. Thinking clearly about performance, part 2. *Communications of the ACM*, 53(10):39–45, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Montagne:2010:TAC

[318] Kevin Montagne. Tackling architectural complexity with modeling. *Communications of the ACM*, 53(10):46–52, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Serre:2010:NAC

[319] Thomas Serre and Tomaso Poggio. A neuromorphic approach to computer vision. *Communications of the ACM*, 53(10):54–61, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tambe:2010:HOA

[320] Prasanna B. Tambe and Lorin M. Hitt. How offshoring affects IT workers. *Communications of the ACM*, 53(10):62–70, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rodrigues:2010:PPS

[321] Rodrigo Rodrigues and Peter Druschel. Peer-to-peer systems. *Communications of the ACM*, 53(10):72–82, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Waldspurger:2010:VEM

[322] Carl Waldspurger. A VM ‘engine’ that makes a difference: technical perspective. *Communications of the ACM*, 53(10):84, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gupta:2010:DEH

[323] Diwaker Gupta, Sangmin Lee, Michael Vrable, Stefan Savage, Alex C. Snoeren, George Varghese, Geoffrey M. Voelker, and Amin Vahdat. Difference engine: harnessing memory redundancy in virtual machines. *Communications of the ACM*, 53(10):85–93, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Weiss:2010:BPT

[324] Yair Weiss and Judea Pearl. Belief propagation: technical perspective. *Communications of the ACM*, 53(10):94, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sudderth:2010:NBP

[325] Erik B. Sudderth, Alexander T. Ihler, Michael Isard, William T. Freeman, and Alan S. Willsky. Nonparametric belief propagation. *Communications of the ACM*, 53(10):95–103, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2010:LBQd

[326] Leah Hoffmann. Last byte: Q&A: Gray's Paradigm. *Communications of the ACM*, 53(10):112–ff, October 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2010:PNC

[327] Moshe Y. Vardi. On P, NP, and computational complexity. *Communications of the ACM*, 53(11):5, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:LEHb

[328] CACM Staff. Letters to the Editor: How to think about objects. *Communications of the ACM*, 53(11):6–7, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:VEi

[329] CACM Staff. In the virtual extension. *Communications of the ACM*, 53(11):9, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lau:2010:BRS

[330] Tessa Lau. BLOG@CACM: Rethinking the systems review process. *Communications of the ACM*, 53(11):10–11, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2010:COPb

[331] David Roman. CACM online: a preference for PDF. *Communications of the ACM*, 53(11):12, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2010:NTD

[332] Gregory Goth. News: Turning data into knowledge. *Communications of the ACM*, 53(11):13–15, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2010:NSC

[333] Gary Anthes. News: Security in the cloud. *Communications of the ACM*, 53 (11):16–18, November 2010. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2010:NCO

[334] Leah Hoffmann. News: Career opportunities. *Communications of the ACM*, 53(11):19–21, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2010:NWO

[335] Neil Savage. News: Wide open spaces. *Communications of the ACM*, 53(11):23, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Boczkowski:2010:EBD

[336] Pablo J. Boczkowski. Economic and business dimensions: The divergent online news preferences of journalists and readers. *Communications of the ACM*, 53(11):24–25, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cooper:2010:EKC

[337] Stephen Cooper, Lance C. Pérez, and Daphne Rainey. Education: K–12 computational learning. *Communications of the ACM*, 53(11):27–29, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2010:LSW

[338] Pamela Samuelson. Legally speaking: Why do software startups patent (or not)? *Communications of the ACM*, 53 (11):30–32, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Brenner:2010:PSW

[339] Joel F. Brenner. Privacy and security: Why isn't cyberspace more secure? *Communications of the ACM*, 53 (11):33–35, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Welsh:2010:VSN

[340] Matt Welsh. Viewpoint: Sensor networks for the sciences. *Communications of the ACM*, 53(11):36–39, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fitzpatrick:2010:CAD

[341] Brian W. Fitzpatrick and JJ Lueck. The case against data lock-in. *Communications of the ACM*, 53(11):42–46, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosenthal:2010:KBS

[342] David S. H. Rosenthal. Keeping bits safe: how hard can it be? *Communications of the ACM*, 53(11):47–55, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kamp:2010:SPS

[343] Poul-Henning Kamp. Sir, please step away from the ASR-33! *Communications of the ACM*, 53(11):56–57, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Garland:2010:UTO

[344] Michael Garland and David B. Kirk. Understanding throughput-oriented architectures. *Communications of the ACM*, 53(11):58–66, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vogl:2010:RIG

[345] Patrick Vogl and Michael Barrett. Regulating the information gatekeepers. *Communications of the ACM*, 53 (11):67–72, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Faliszewski:2010:UCP

[346] Piotr Faliszewski, Edith Hemaspaandra, and Lane A. Hemaspaandra. Using complexity to protect elections. *Communications of the ACM*, 53(11): 74–82, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Adve:2010:DRE

[347] Sarita Adve. Data races are evil with no exceptions: technical perspective. *Communications of the ACM*, 53(11):84, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Elmas:2010:GRA

[348] Tayfun Elmas, Shaz Qadeer, and Serdar Tasiran. Goldilocks: a race-aware Java runtime. *Communications of the ACM*, 53(11):85–92, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Flanagan:2010:FEP

[349] Cormac Flanagan and Stephen N. Freund. FastTrack: efficient and precise dynamic race detection. *Communications of the ACM*, 53(11):93–101, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2010:LBPg

[350] Peter Winkler. Last byte: Puzzled: Rectangles galore. *Communications of the ACM*, 53(11):112, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Buell:2010:VVE

[351] Duncan Buell. Viewpoints: Virtual extension: In support of computer science teachers and the CSTA. *Communications of the ACM*, 53(11): 113–115, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ficco:2010:VES

[352] Massimo Ficco, Roberto Pietrantuono, and Stefano Russo. Virtual extension: Supporting ubiquitous location information in interworking 3G and wireless networks. *Communications of the ACM*, 53(11):116–123, November 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Freyne:2010:VER

[353] Jill Freyne, Lorcan Coyle, Barry Smyth, and Padraig Cunningham. Virtual extension: Relative status of journal and conference publications in computer science. *Communications of the ACM*, 53(11):124–132, November 2010.

CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Patterson:2010:DC

[354] David A. Patterson. Diverse connections. *Communications of the ACM*, 53(12):5, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:SFL

[355] CACM Staff. Science has four legs. *Communications of the ACM*, 53(12):6–7, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:VEj

[356] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 53(12):9, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Linden:2010:SAM

[357] Greg Linden, Jason Hong, and Mark Guzdial. Security advice; malvertisements; and CS education in Qatar. *Communications of the ACM*, 53(12): 10–11, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2010:SGN

[358] David Roman. School grades need improvement. *Communications of the ACM*, 53(12):12, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2010:EI

[359] Gregory Goth. The eyes have it. *Communications of the ACM*, 53(12): 13–15, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2010:TMV

[360] Gary Anthes. Topic models vs. unstructured data. *Communications of the ACM*, 53(12):16–18, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Krakovsky:2010:CER

[361] Marina Krakovsky. CSEdWeek expands its reach. *Communications of the ACM*, 53(12):19, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2010:NFW

[362] Samuel Greengard. The new face of war. *Communications of the ACM*, 53 (12):20–22, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lindley:2010:MP

[363] David Lindley. A matter of privacy. *Communications of the ACM*, 53(12):23, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goodman:2010:CAT

[364] Seymour Goodman and Andrew Harris. The coming African tsunami of information insecurity. *Communications of the ACM*, 53(12):24–27, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Smotherman:2010:ISP

[365] Mark Smotherman and Dag Spicer. IBM's single-processor supercomputer

efforts. *Communications of the ACM*, 53(12):28–30, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gates:2010:RHS

[366] Ann Quiroz Gates. The role of Hispanic-serving institutions in contributing to an educated work force. *Communications of the ACM*, 53(12): 31–33, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2010:LQU

[367] Peter J. Denning and Robert E. Kahn. The long quest for universal information access. *Communications of the ACM*, 53(12):34–36, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2010:LC

[368] George V. Neville-Neil. Literate coding. *Communications of the ACM*, 53 (12):37–38, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Berman:2010:WNR

[369] Francine Berman. We need a research data census. *Communications of the ACM*, 53(12):39–41, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2010:CEC

[370] CACM Staff. A conversation with Ed Catmull. *Communications of the ACM*, 53(12):42–47, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Creeger:2010:TBI

[371] Mache Creeger. The theft of business innovation: an ACM–BCS roundtable on threats to global competitiveness. *Communications of the ACM*, 53(12): 48–55, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shao:2010:CS

[372] Zhong Shao. Certified software. *Communications of the ACM*, 53(12):56–66, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Andriole:2010:BIW

[373] Stephen J. Andriole. Business impact of Web 2.0 technologies. *Communications of the ACM*, 53(12):67–79, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Darwiche:2010:BN

[374] Adnan Darwiche. Bayesian networks. *Communications of the ACM*, 53(12): 80–90, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Elad:2010:ISR

[375] Michael Elad and Raja Giryes. Iterative signal recovery from incomplete samples: technical perspective. *Communications of the ACM*, 53(12):92, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Needell:2010:CIS

[376] Deanna Needell and Joel A. Tropp. CoSaMP: iterative signal recovery from incomplete and inaccurate samples. *Communications of the ACM*, 53(12): 93–100, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Aaronson:2010:QPB

[377] Scott Aaronson. QIP = PSPACE breakthrough: technical perspective. *Communications of the ACM*, 53 (12):101, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jain:2010:QP

[378] Rahul Jain, Zhengfeng Ji, Sarvagya Upadhyay, and John Watrous. QIP = PSPACE. *Communications of the ACM*, 53(12):102–109, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2010:LBPh

[379] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 53(12):126, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rumilisoun:2010:FTR

[380] Rumilisoun. Future tense: Rebirth of worlds. *Communications of the ACM*, 53(12):128–ff, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Franceschet:2010:RCP

[381] Massimo Franceschet. The role of conference publications in CS. *Communications of the ACM*, 53(12):129–132, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lunt:2010:IHN

[382] Barry Lunt, J. Ekstrom, Han Reichgelt, Michael Bailey, and Richard Leblanc. IT 2008: the history of a new computing discipline. *Communications of the ACM*, 53(12):133–141, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Morelli:2010:GCD

[383] Ralph Morelli, Chamindra de Silva, Trishan de Lanerolle, Rebecca Curzon, and Xin Sheng Mao. A global collaboration to deploy help to China. *Communications of the ACM*, 53(12): 142–149, December 2010. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2011:WAW

[384] Moshe Y. Vardi. Where have all the workshops gone? *Communications of the ACM*, 54(1):5, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:CWT

[385] CACM Staff. To change the world, take a chance. *Communications of the ACM*, 54(1):6–7, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anonymous:2011:VE

[386] Anonymous. In the Virtual Extension. *Communications of the ACM*, 54(1): 8, January 2011. CODEN CACMA2.

ISSN 0001-0782 (print), 1557-7317 (electronic).

Hall:2011:AAR

[387] Wendy Hall. ACM's annual report. *Communications of the ACM*, 54(1):9–13, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosenberger:2011:SCA

[388] Jack Rosenberger and Judy Robertson. Smart career advice: laptops as a classroom distraction. *Communications of the ACM*, 54(1):14–15, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2011:SPM

[389] David Roman. Scholarly publishing model needs an update. *Communications of the ACM*, 54(1):16–ff, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2011:NSM

[390] Gary Anthes. Nonlinear systems made easy. *Communications of the ACM*, 54(1):17–19, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2011:TSH

[391] Alex Wright. The touchy subject of haptics. *Communications of the ACM*, 54(1):20–22, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Krakovsky:2011:IEE

[392] Marina Krakovsky. India's elephantine effort. *Communications of the ACM*, 54(1):23–24, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosenberger:2011:EPO

[393] Jack Rosenberger. EMET prize and other awards. *Communications of the ACM*, 54(1):25, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2011:DBM

[394] Phillip G. Armour. Don't bring me a good idea. *Communications of the ACM*, 54(1):27–29, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bechtold:2011:GAE

[395] Stefan Bechtold. Google AdWords and European trademark law. *Communications of the ACM*, 54(1):30–32, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2011:RTD

[396] Michael A. Cusumano. Reflections on the Toyota debacle. *Communications of the ACM*, 54(1):33–35, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ryan:2011:CCP

[397] Mark D. Ryan. Cloud computing privacy concerns on our doorstep. *Communications of the ACM*, 54(1):36–38, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Steele:2011:IFA

[398] Guy L. Steele Jr. An interview with Frances E. Allen. *Communications of*

the ACM, 54(1):39–45, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). This article contains an important half-century retrospective on the IBM 7030 Stretch project, and its impact on subsequent computer designs.

Haber:2011:CSA

[399] Eben M. Haber, Eser Kandogan, and Paul P. Maglio. Collaboration in system administration. *Communications of the ACM*, 54(1):46–53, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anonymous:2011:UDA

[400] Anonymous. UX design and agile: a natural fit? *Communications of the ACM*, 54(1):54–60, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). Talking with Julian Gosper, Jean-Luc Agathos, Richard Rutter, and Terry Coatta.

Kotsovinos:2011:VBC

[401] Evangelos Kotsovinos. Virtualization: blessing or curse? *Communications of the ACM*, 54(1):61–65, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wiederhold:2011:FIP

[402] Gio Wiederhold. Follow the intellectual property. *Communications of the ACM*, 54(1):66–74, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vishkin:2011:USA

[403] Uzi Vishkin. Using simple abstraction to reinvent computing for parallelism. *Communications of the ACM*, 54(1):75–85, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dwork:2011:FFP

[404] Cynthia Dwork. A firm foundation for private data analysis. *Communications of the ACM*, 54(1):86–95, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Katabi:2011:SPL

[405] Dina Katabi. Sora promises lasting impact: technical perspective. *Communications of the ACM*, 54(1):98, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tan:2011:SHP

[406] Kun Tan, He Liu, Jiansong Zhang, Yongguang Zhang, Ji Fang, and Geoffrey M. Voelker. Sora: high-performance software radio using general-purpose multi-core processors. *Communications of the ACM*, 54(1):99–107, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wischik:2011:MNC

[407] Damon Wischik. Multipath: a new control architecture for the Internet: technical perspective. *Communications of the ACM*, 54(1):108, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Key:2011:PSM

[408] Peter Key, Laurent Massoulié, and Don Towsley. Path selection and multipath congestion control. *Communications of the ACM*, 54(1):109–116, January

2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McCafferty:2011:LBQ

[409] Dennis McCafferty. Last byte: Q&A: a journey of discovery. *Communications of the ACM*, 54(1):128–ff, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Locasto:2011:ELP

[410] Michael E. Locasto, Anup K. Ghosh, Sushil Jajodia, and Angelos Stavrou. The ephemeral legion: producing an expert cyber-security work force from thin air. *Communications of the ACM*, 54(1):129–131, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Frohlich:2011:MWC

[411] Peter Fröhlich, Antti Oulasvirta, Matthias Baldauf, and Antti Nurminen. On the move, wirelessly connected to the world. *Communications of the ACM*, 54(1):132–138, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hasel:2011:OES

[412] Matthias Häsel. Opensocial: an enabler for social applications on the Web. *Communications of the ACM*, 54 (1):139–144, January 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rodden:2011:IOM

[413] Tom Rodden. ICPS offers major research venue. *Communications of the ACM*, 54(2):5, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:SLC

[414] CACM Staff. Shine the light of computational complexity. *Communications of the ACM*, 54(2):6–7, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:VEa

[415] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 54(2):9, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hong:2011:MD

[416] Jason Hong. Matters of design. *Communications of the ACM*, 54(2):10–11, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2011:EDC

[417] David Roman. End of days for Communications in print? *Communications of the ACM*, 54(2):12, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2011:CGG

[418] Gregory Goth. Chipping away at greenhouse gases. *Communications of the ACM*, 54(2):13–15, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2011:ITA

[419] Neil Savage. Information theory after Shannon. *Communications of the ACM*, 54(2):16–18, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2011:MWL

[420] Leah Hoffmann. Maurice Wilkes: the last pioneer. *Communications of the ACM*, 54(2):19, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2011:FC

[421] Samuel Greengard. Following the crowd. *Communications of the ACM*, 54(2):20–22, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2011:ALN

[422] Gary Anthes. ACM launches new Digital Library. *Communications of the ACM*, 54(2):23–24, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:AFH

[423] CACM Staff. ACM Fellows honored. *Communications of the ACM*, 54(2):25, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Conway:2011:AC

[424] Maura Conway. Against cyberterrorism. *Communications of the ACM*, 54(2):26–28, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosston:2011:HDB

[425] Gregory Rosston, Scott Savage, and Donald Waldman. Household demand for broadband Internet service. *Communications of the ACM*, 54(2):29–31, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ledin:2011:GHT

[426] George Ledin, Jr. The growing harm of not teaching malware. *Communications of the ACM*, 54(2):32–34, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2011:FT

[427] George V. Neville-Neil. Forest for the trees. *Communications of the ACM*, 54(2):35–36, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2011:SE

[428] Mark Guzdial. From science to engineering. *Communications of the ACM*, 54(2):37–39, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Grudin:2011:TCC

[429] Jonathan Grudin. Technology, conferences, and community. *Communications of the ACM*, 54(2):41–43, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Harty:2011:FUB

[430] Julian Harty. Finding usability bugs with automated tests. *Communications of the ACM*, 54(2):44–49, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Limoncelli:2011:PSS

[431] Thomas A. Limoncelli. A plea from sysadmins to software vendors: 10

do's and don'ts. *Communications of the ACM*, 54(2):50–51, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lear:2011:SAS

[432] Christina Lear. System administration soft skills. *Communications of the ACM*, 54(2):52–58, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wachs:2011:VBH

[433] Juan Pablo Wachs, Mathias Kölsch, Helman Stern, and Yael Edan. Vision-based hand-gesture applications. *Communications of the ACM*, 54(2):60–71, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cafarella:2011:SDW

[434] Michael J. Cafarella, Alon Halevy, and Jayant Madhavan. Structured data on the Web. *Communications of the ACM*, 54(2):72–79, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Davies:2011:SBM

[435] Stephen Davies. Still building the Memex. *Communications of the ACM*, 54(2):80–88, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Pereira:2011:MMB

[436] Fernando Pereira. Markov meets Bayes: technical perspective. *Communications of the ACM*, 54(2):90, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wood:2011:SM

[437] Frank Wood, Jan Gasthaus, Cédric Archambeau, Lancelot James, and Yee Whye Teh. The sequence memoizer. *Communications of the ACM*, 54(2):91–98, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jouppi:2011:DEW

[438] Norman P. Jouppi. DRAM errors in the wild: technical perspective. *Communications of the ACM*, 54(2):99, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Schroeder:2011:DEW

[439] Bianca Schroeder, Eduardo Pinheiro, and Wolf-Dietrich Weber. DRAM errors in the wild: a large-scale field study. *Communications of the ACM*, 54 (2):100–107, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2011:LBPa

[440] Peter Winkler. Last byte: Puzzled: Parsing partitions. *Communications of the ACM*, 54(2):112, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Estell:2011:NNG

[441] John K. Estell and Ken Christensen. The need for a new graduation rite of passage. *Communications of the ACM*, 54(2):113–115, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Zhao:2011:SPV

[442] Qinping Zhao. 10 scientific problems in virtual reality. *Communications of the ACM*, 54(2):116–118, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2011:OGS

[443] David Wright, Paul De Hert, and Serge Gutwirth. Are the OECD guidelines at 30 showing their age? *Communications of the ACM*, 54(2):119–127, February 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2011:FF

[444] Moshe Y. Vardi. Fumbling the future. *Communications of the ACM*, 54(3):5, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:FSA

[445] CACM Staff. Free speech for algorithms? *Communications of the ACM*, 54(3):6–7, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:VEb

[446] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 54(3):11, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2011:SEC

[447] Mark Guzdial and Greg Linden. Scientists, engineers, and computer science; industry and research groups. *Communications of the ACM*, 54(3):12–13, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roman:2011:TC

[448] David Roman. Time to change. *Communications of the ACM*, 54(3):14, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2011:GCF

[449] Kirk L. Kroeker. Grid computing's future. *Communications of the ACM*, 54(3):15–17, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2011:TMM

[450] Neil Savage. Twitter as medium and message. *Communications of the ACM*, 54(3):18–20, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2011:EGF

[451] Tom Geller. Evaluating government funding. *Communications of the ACM*, 54(3):21, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2011:MPF

[452] Gary Anthes. Memristors: pass or fail? *Communications of the ACM*, 54(3):22–24, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2011:GCT

[453] Samuel Greengard. Gary Chapman, technologist: 1952–2010. *Communications of the ACM*, 54(3):25, March

2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2011:DYO

[454] Pamela Samuelson. Do you own the software you buy? *Communications of the ACM*, 54(3):26–28, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Pimple:2011:SM

[455] Kenneth D. Pimple. Surrounded by machines. *Communications of the ACM*, 54(3):29–31, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2011:MT

[456] Peter J. Denning. Managing time. *Communications of the ACM*, 54 (3):32–34, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chubin:2011:PGT

[457] Daryl E. Chubin and Roosevelt Y. Johnson. A program greater than the sum of its parts: the BPC alliances. *Communications of the ACM*, 54(3):35–37, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Snir:2011:CIS

[458] Marc Snir. Computer and information science and engineering: one discipline, many specialties. *Communications of the ACM*, 54(3):38–43, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Burgess:2011:TSA

[459] Mark Burgess. Testable system administration. *Communications of the ACM*, 54(3):44–49, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stapleton-Gray:2011:NID

[460] Ross Stapleton-Gray and William Woodcock. National Internet defense—small states on the skirmish line. *Communications of the ACM*, 54(3):50–55, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kamp:2011:BCT

[461] Poul-Henning Kamp. B.Y.O.C (1,342 times and counting). *Communications of the ACM*, 54(3):56–58, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Borner:2011:PPM

[462] Katy Börner. Plug-and-play macroscopes. *Communications of the ACM*, 54(3):60–69, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stajano:2011:USV

[463] Frank Stajano and Paul Wilson. Understanding scam victims: seven principles for systems security. *Communications of the ACM*, 54(3):70–75, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shavit:2011:DSM

[464] Nir Shavit. Data structures in the multicore age. *Communications of*

the ACM, 54(3):76–84, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bello:2011:CVM

[465] Juan Bello, Yann LeCun, and Robert Rowe. Concerto for violin and Markov model: technical perspective. *Communications of the ACM*, 54(3):86, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Raphael:2011:IP

[466] Christopher Raphael. The informatics philharmonic. *Communications of the ACM*, 54(3):87–93, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rexford:2011:VTP

[467] Jennifer Rexford. VL2: technical perspective. *Communications of the ACM*, 54(3):94, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greenberg:2011:VSF

[468] Albert Greenberg, James R. Hamilton, Navendu Jain, Srikanth Kandula, Changhoon Kim, Parantap Lahiri, David A. Maltz, Parveen Patel, and Sudipta Sengupta. VL2: a scalable and flexible data center network. *Communications of the ACM*, 54(3):95–104, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2011:LBPb

[469] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 54(3):109, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Benford:2011:FT

[470] Gregory Benford. Future tense. *Communications of the ACM*, 54(3):112–ff, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosamond:2011:RMB

[471] Frances Rosamond, Roswitha Bardohl, Stephan Diehl, Uwe Geisler, Gordon Bolduan, Annette Lessmöllmann, Andreas Schwill, and Ulrike Stege. Reaching out to the media: become a computer science ambassador. *Communications of the ACM*, 54(3):113–116, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Garrett:2011:IE

[472] R. Kelly Garrett and James N. Danziger. The Internet electorate. *Communications of the ACM*, 54 (3):117–123, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

DeHertogh:2011:GW

[473] Steven De Hertogh, Stijn Viaene, and Guido Dedene. Governing Web 2.0. *Communications of the ACM*, 54(3):124–130, March 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Schnabel:2011:ECN

[474] Robert B. Schnabel. Educating computing's next generation. *Communications of the ACM*, 54(4):5, April 2011.

CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:VEc

[475] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 54(4):8, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:WPI

[476] CACM Staff. I want a personal information pod. *Communications of the ACM*, 54(4):9, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hong:2011:MDP

[477] Jason Hong. Matters of design, part II. *Communications of the ACM*, 54(4):10–11, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Delman:2011:AM

[478] Scott E. Delman. ACM on the move. *Communications of the ACM*, 54(4):12, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2011:QR

[479] Gary Anthes. The quest for randomness. *Communications of the ACM*, 54(4):13–15, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2011:ESA

[480] Kirk L. Kroeker. Engineering sensation in artificial limbs. *Communications of the ACM*, 54(4):16–18, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2011:SGV

[481] Samuel Greengard. Social games, virtual goods. *Communications of the ACM*, 54(4):19–22, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Underwood:2011:BCS

[482] Sarah Underwood. British computer scientists reboot. *Communications of the ACM*, 54(4):23, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Niederman:2011:MGI

[483] Fred Niederman and Felix B. Tan. Managing global IT teams: considering cultural dynamics. *Communications of the ACM*, 54(4):24–27, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ensmenger:2011:BCA

[484] Nathan Ensmenger. Building castles in the air. *Communications of the ACM*, 54(4):28–30, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2011:PWC

[485] Michael A. Cusumano. Platform wars come to social media. *Communications of the ACM*, 54(4):31–33, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2011:CB

[486] George V. Neville-Neil. Coder's block. *Communications of the ACM*, 54(4):

34–35, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gomez-Barroso:2011:ASN

[487] José Luis Gómez-Barroso and Claudio Feijóo. Asymmetries and shortages of the network neutrality principle. *Communications of the ACM*, 54(4):36–37, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Parri:2011:RCP

[488] Jonathan Parri, Daniel Shapiro, Miodrag Bolic, and Voicu Groza. Returning control to the programmer: SIMD intrinsics for virtual machines. *Communications of the ACM*, 54(4):38–43, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Limoncelli:2011:SSI

[489] Thomas A. Limoncelli and Vinton G. Cerf. Successful strategies for IPv6 rollouts: Really. *Communications of the ACM*, 54(4):44–48, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Meijer:2011:CRM

[490] Erik Meijer and Gavin Bierman. A co-relational model of data for large shared data banks. *Communications of the ACM*, 54(4):49–58, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Agrawala:2011:DPV

[491] Maneesh Agrawala, Wilmot Li, and Floraine Berthouzoz. Design principles for visual communication. *Communications of the ACM*, 54(4):60–69, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dragojevik:2011:WSC

[492] Aleksandar Dragojevik, Pascal Felber, Vincent Gramoli, and Rachid Guerraoui. Why STM can be more than a research toy. *Communications of the ACM*, 54(4):70–77, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tang:2011:RDR

[493] John C. Tang, Manuel Cebrian, Nicklaus A. Giacobe, Hyun-Woo Kim, Taemie Kim, and Douglas "Beaker" Wickert. Reflecting on the DARPA Red Balloon Challenge. *Communications of the ACM*, 54(4):78–85, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Doan:2011:CSW

[494] Anhai Doan, Raghu Ramakrishnan, and Alon Y. Halevy. Crowdsourcing systems on the World-Wide Web. *Communications of the ACM*, 54(4):86–96, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Berry:2011:LIS

[495] Daniel M. Berry. Liability issues in software engineering: technical perspective. *Communications of the ACM*, 54(4):98, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

LeMetayer:2011:LIS

[496] Daniel Le Métayer, Manuel Maarek, Eduardo Mazza, Marie-Laure Potet, Stéphane Frénot, Valérie Viet Triem Tong, Nicolas Craipeau, and Ronan Hardouin. Liability issues in software engineering: the use of formal methods to reduce legal uncertainties. *Communications of the ACM*, 54(4):99–106, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sudan:2011:PHS

[497] Madhu Sudan. Patterns hidden from simple algorithms: technical perspective. *Communications of the ACM*, 54(4):107, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Braverman:2011:PLI

[498] Mark Braverman. Poly-logarithmic independence fools bounded-depth Boolean circuits. *Communications of the ACM*, 54(4):108–115, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2011:LBQa

[499] Leah Hoffmann. Last byte: Q&A: The chief computer. *Communications of the ACM*, 54(4):120–ff, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Morreale:2011:RFC

[500] Patricia Morreale and David Joiner. Reaching future computer scientists. *Communications of the ACM*, 54 (4):121–124, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Majchrzak:2011:EWR

[501] Ann Majchrzak and Philip H. B. More. Emergency! Web 2.0 to the rescue! *Communications of the ACM*, 54(4):125–132, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Grossman:2011:RDC

[502] Fred Grossman, Charles Tappert, Joe Bergin, and Susan M. Merritt. A research doctorate for computing professionals. *Communications of the ACM*, 54(4):133–141, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Canfora:2011:ACS

[503] Gerardo Canfora, Massimiliano Di Penta, and Luigi Cerulo. Achievements and challenges in software reverse engineering. *Communications of the ACM*, 54(4):142–151, April 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2011:TSC

[504] Moshe Y. Vardi. Technology has social consequences. *Communications of the ACM*, 54(5):5, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:PPS

[505] CACM Staff. Preserve privacy in statistical correlations. *Communications of the ACM*, 54(5):6–7, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:VEd

[506] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 54(5):9, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stonebraker:2011:SDW

[507] Michael Stonebraker. Stonebraker on data warehouses. *Communications of the ACM*, 54(5):10–11, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Delman:2011:LAH

[508] Scott E. Delman. Let ACM help you find your next job 'online'. *Communications of the ACM*, 54(5):12, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2011:STP

[509] Neil Savage. Sorting through photos. *Communications of the ACM*, 54(5):13–15, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2011:DR

[510] Gregory Goth. I, domestic robot. *Communications of the ACM*, 54(5):16–17, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2011:DOD

[511] Leah Hoffmann. Data optimization in developing nations. *Communications of the ACM*, 54(5):18–20, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Krakovsky:2011:DEM

[512] Marina Krakovsky. Deus ex machina. *Communications of the ACM*, 54(5):22, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2011:WSM

[513] Alex Wright. Web science meets network science. *Communications of the ACM*, 54(5):23, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goldfarb:2011:OAB

[514] Avi Goldfarb and Catherine E. Tucker. Online advertising, behavioral targeting, and privacy. *Communications of the ACM*, 54(5):25–27, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dorn:2011:RLB

[515] Brian Dorn. Reaching learners beyond our hallowed halls. *Communications of the ACM*, 54(5):28–30, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wu:2011:BLC

[516] Tim Wu. Bell Labs and centralized innovation. *Communications of the ACM*, 54(5):31–33, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fitzpatrick:2011:ISF

[517] Jason Fitzpatrick. An interview with Steve Furber. *Communications of the ACM*, 54(5):34–39, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anel:2011:IRC

[518] Juan A. Añel. The importance of reviewing the code. *Communications of the ACM*, 54(5):40–41, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kamp:2011:OSW

[519] Poul-Henning Kamp. The one-second war. *Communications of the ACM*, 54(5):44–48, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Charland:2011:MAD

[520] Andre Charland and Brian Leroux. Mobile application development: Web vs. native. *Communications of the ACM*, 54(5):49–53, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McKenzie:2011:WMA

[521] Patrick McKenzie. Weapons of mass assignment. *Communications of the ACM*, 54(5):54–59, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McFarland:2011:BCI

[522] Dennis J. McFarland and Jonathan R. Wolpaw. Brain-computer interfaces for communication and control. *Communications of the ACM*, 54(5):60–66, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Borkar:2011:FM

[523] Shekhar Borkar and Andrew A. Chien. The future of microprocessors. *Communications of the ACM*, 54(5):67–77, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Afanasyev:2011:PPN

[524] Mikhail Afanasyev, Tadayoshi Kohno, Justin Ma, Nick Murphy, Stefan Savage, Alex C. Snoeren, and Geoffrey M. Voelker. Privacy-preserving network forensics. *Communications of the ACM*, 54(5):78–87, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cook:2011:PPT

[525] Byron Cook, Andreas Podelski, and Andrey Rybalchenko. Proving program termination. *Communications of the ACM*, 54(5):88–98, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Parkes:2011:CFP

[526] David C. Parkes. Complex financial products: caveat emptor: technical perspective. *Communications of the ACM*, 54(5):100, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Arora:2011:CCI

[527] Sanjeev Arora, Boaz Barak, Markus Brunnermeier, and Rong Ge. Computational complexity and information asymmetry in financial products. *Communications of the ACM*, 54(5):101–107, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sapiro:2011:IEL

[528] Guillermo Sapiro. Images everywhere: looking for models: technical perspective. *Communications of the*

ACM, 54(5):108, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Buades:2011:SSB

[529] Antoni Buades, Bartomeu Coll, and Jean-Michel Morel. Self-similarity-based image denoising. *Communications of the ACM*, 54(5):109–117, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2011:LBPc

[530] Peter Winkler. Last byte: Puzzled: Games, roles, turns. *Communications of the ACM*, 54(5):120, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dhar:2011:CBM

[531] Subhankar Dhar and Upkar Varshney. Challenges and business models for mobile location-based services and advertising. *Communications of the ACM*, 54(5):121–128, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Schryen:2011:OSS

[532] Guido Schryen. Is open source security a myth? *Communications of the ACM*, 54(5):130–140, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wainer:2011:IWS

[533] Jacques Wainer, Cleo Billa, and Siome Goldenstein. Invisible work in standard bibliometric evaluation of computer science. *Communications of the ACM*, 54(5):141–146, May 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Narayanan:2011:CI

[534] P. J. Narayanan and Anand Deshpanda. Computing and India. *Communications of the ACM*, 54(6):5, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:WCO

[535] CACM Staff. Why concurrent objects are recurrently complicated. *Communications of the ACM*, 54(6):6, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:VEe

[536] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 54(6):7, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Reed:2011:SDR

[537] Daniel Reed, Mark Guzdial, and Judy Robertson. Simple design; research vs. teaching; and quest to learn. *Communications of the ACM*, 54(6):8–9, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Delman:2011:SIV

[538] Scott E. Delman. Say it with video. *Communications of the ACM*, 54(6):10, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2011:BIN

[539] Kirk L. Kroeker. Biology-inspired networking. *Communications of the ACM*, 54(6):11–13, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2011:BEL

[540] Gary Anthes. Beauty and elegance: Leslie Valiant talks about machine learning, parallel computing, and his quest for simplicity. *Communications of the ACM*, 54(6):14–15, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2011:PFD

[541] Tom Geller. The promise of flexible displays. *Communications of the ACM*, 54(6):16–18, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2011:UP

[542] Gregory Goth. Unlimited possibilities. *Communications of the ACM*, 54(6):19, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Krakovsky:2011:ANT

[543] Marina Krakovsky. All the news that's fit for you. *Communications of the ACM*, 54(6):20–21, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Schwartz:2011:IMP

[544] Ari Schwartz. Identity management and privacy: a rare opportunity to get it right. *Communications of the ACM*, 54(6):22–24, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2011:WWN

[545] Peter J. Denning and Dennis J. Frailey. Who are we—now? *Communications of the ACM*, 54(6):25–27, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2011:PAT

[546] Phillip G. Armour. Practical application of theoretical estimation. *Communications of the ACM*, 54(6):28–30, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Parnas:2011:RST

[547] David Lorge Parnas. The risks of stopping too soon. *Communications of the ACM*, 54(6):31–33, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2011:TBY

[548] George V. Neville-Neil. Think before you fork. *Communications of the ACM*, 54(6):34–35, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Morrison:2011:CSC

[549] Clayton T. Morrison and Richard T. Snodgrass. Computer science can use more science. *Communications of the ACM*, 54(6):36–38, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Helland:2011:IYT

[550] Pat Helland. If you have too much data, then 'good enough' is good enough. *Communications of the ACM*, 54(6):40–47, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rys:2011:SS

[551] Michael Rys. Scalable SQL. *Communications of the ACM*, 54(6):48–53, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hu:2011:DDW

[552] Qing Hu, Zhengchuan Xu, Tamara Dinev, and Hong Ling. Does deterrence work in reducing information security policy abuse by employees? *Communications of the ACM*, 54(6):54–60, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Edwards:2011:ASH

[553] W. Keith Edwards, Rebecca E. Grinter, Ratul Mahajan, and David Wetherall. Advancing the state of home networking. *Communications of the ACM*, 54(6):62–71, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stonebraker:2011:RSP

[554] Michael Stonebraker and Rick Cattell. 10 rules for scalable performance in 'simple operation' datastores. *Communications of the ACM*, 54(6):72–80, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Barnett:2011:SVS

[555] Mike Barnett, Manuel Fähndrich, K. Rustan M. Leino, Peter Müller, Wolfram Schulte, and Herman Venter. Specification and verification: the Spec# experience. *Communications of the ACM*, 54(6):81–91, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Franceschet:2011:PSS

[556] Massimo Franceschet. PageRank: standing on the shoulders of giants. *Communications of the ACM*, 54(6): 92–101, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kolaitis:2011:QLP

[557] Phokion G. Kolaitis. The quest for a logic for polynomial-time computation: technical perspective. *Communications of the ACM*, 54(6):103, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Grohe:2011:PTQ

[558] Martin Grohe. From polynomial time queries to graph structure theory. *Communications of the ACM*, 54(6):104–112, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Franklin:2011:DAA

[559] Michael J. Franklin. Data analysis at astonishing speed: technical perspective. *Communications of the ACM*, 54(6):113–13, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Melnik:2011:DIA

[560] Sergey Melnik, Andrey Gubarev, Jing Jing Long, Geoffrey Romer, Shiva Shivakumar, Matt Tolton, and Theo Vassilakis. Dremel: interactive analysis of Web-scale datasets. *Communications of the ACM*, 54(6):114–123, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2011:LBPd

[561] Peter Winkler. Last byte: Puzzled: a lifelong learner. *Communications of the ACM*, 54(6):126, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2011:LBQb

[562] Leah Hoffmann. Last byte: Q&A: a lifelong learner: Leslie Valiant discusses machine learning, parallel computing, and computational neuroscience. *Communications of the ACM*, 54(6):128, 127, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Boldi:2011:VDS

[563] Paolo Boldi, Francesco Bonchi, Carlos Castillo, and Sebastiano Vigna. Viscous democracy for social networks. *Communications of the ACM*, 54(6):129–137, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mcmanus:2011:WPC

[564] Denise Mcmanus, Houston Carr, and Benjamin Adams. Wireless on the precipice: The 14th century revisited. *Communications of the ACM*, 54(6):138–143, June 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2011:SU

[565] Moshe Y. Vardi. Solving the unsolvable. *Communications of the ACM*, 54(7):5, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:PRY

[566] CACM Staff. Practical research yields fundamental insight, too. *Communications of the ACM*, 54(7):6–7, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:VEf

[567] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 54(7):9, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wing:2011:RPR

[568] Jeannette M. Wing and Ed H. Chi. Reviewing peer review. *Communications of the ACM*, 54(7):10–11, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Delman:2011:AAP

[569] Scott E. Delman. ACM aggregates publication statistics in the ACM Digital Library. *Communications of the ACM*, 54(7):12, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2011:WWI

[570] Kirk L. Kroeker. Weighing Watson's impact. *Communications of the ACM*, 54(7):13–15, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2011:AA

[571] Alex Wright. Automotive autonomy. *Communications of the ACM*, 54(7): 16–18, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McCafferty:2011:BNS

[572] Dennis McCafferty. Brave, new social world. *Communications of the ACM*, 54(7):19–21, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:AAR

[573] CACM Staff. ACM award recipients. *Communications of the ACM*, 54(7):22, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sako:2011:DPG

[574] Mari Sako. Driving power in global supply chains. *Communications of the ACM*, 54(7):23–25, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Knobel:2011:VD

[575] Cory Knobel and Geoffrey C. Bowker. Values in design. *Communications of the ACM*, 54(7):26–28, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2011:TMC

[576] Pamela Samuelson. Too many copyrights? *Communications of the ACM*, 54(7):29–31, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ong:2011:SWC

[577] Maria (Mia) Ong. The status of women of color in computer science. *Communications of the ACM*, 54(7):32–34, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ben-Ari:2011:NMA

[578] Mordechai (Moti) Ben-Ari. Non-myths about programming. *Communications of the ACM*, 54(7):35–37, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ierusalimschy:2011:PLT

[579] Roberto Ierusalimschy, Luiz Henrique De Figueiredo, and Waldemar Celes. Passing a language through the eye of a needle. *Communications of the ACM*, 54(7):38–43, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ghosh:2011:DU

[580] Debasish Ghosh. DSL for the uninitiated. *Communications of the ACM*, 54(7):44–50, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:MPD

[581] CACM Staff. Microsoft's protocol documentation program: interoperability testing at scale. *Communications of the ACM*, 54(7):51–57, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Edwards:2011:ACC

[582] Michael Edwards. Algorithmic composition: computational thinking in music. *Communications of the ACM*, 54(7):58–67, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ball:2011:DSM

[583] Thomas Ball, Vladimir Levin, and Sriram K. Rajamani. A decade of software

model checking with SLAM. *Communications of the ACM*, 54(7):68–76, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hellerstein:2011:SJG

[584] Joseph M. Hellerstein and David L. Tennenhouse. Searching for Jim Gray: a technical overview. *Communications of the ACM*, 54(7):77–87, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wicker:2011:CTQ

[585] Stephen B. Wicker. Cellular telephony and the question of privacy. *Communications of the ACM*, 54(7):88–98, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Barroso:2011:FFA

[586] Luiz André Barroso. FAWN: a Fast Array of Wimpy Nodes: technical perspective. *Communications of the ACM*, 54(7):100, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Andersen:2011:FFA

[587] David G. Andersen, Jason Franklin, Michael Kaminsky, Amar Phanishayee, Lawrence Tan, and Vijay Vasudevan. FAWN: a Fast Array of Wimpy Nodes. *Communications of the ACM*, 54(7):101–109, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ousterhout:2011:SYE

[588] John Ousterhout. Is scale your enemy, or is scale your friend?: technical perspective. *Communications of the ACM*, 54(7):110, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kinshumann:2011:DVL

[589] Kinshuman Kinshumann, Kirk Glerum, Steve Greenberg, Gabriel Aul, Vince Orgovan, Greg Nichols, David Grant, Gretchen Loihle, and Galen Hunt. Debugging in the (very) large: ten years of implementation and experience. *Communications of the ACM*, 54(7):111–116, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rucker:2011:FT

[590] Rudy Rucker. Future tense. *Communications of the ACM*, 54(7):120–ff, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ousterhout:2011:CR

[591] John Ousterhout, Parag Agrawal, David Erickson, Christos Kozyrakis, Jacob Leverich, David Mazières, Subhasish Mitra, Aravind Narayanan, Diego Ongaro, Guru Parulkar, Mendel Rosenblum, Stephen M. Rumble, Eric Stratmann, and Ryan Stutsman. The case for RAMCloud. *Communications of the ACM*, 54(7):121–130, July 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dasgupta:2011:WMP

[592] Gargi Dasgupta, Amit Sharma, Akshat Verma, Anindya Neogi, and Ravi Kothari. Workload management for power efficiency in virtualized data centers. *Communications of the ACM*, 54(7):131–141, July 2011. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Reisman:2011:PIC

[593] Sorel Reisman and Alain Chesnais. From the Presidents of the IEEE Computer Society and ACM. *Communications of the ACM*, 54(8):5, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:PDV

[594] CACM Staff. A policy that deters violation of security policy. *Communications of the ACM*, 54(8):7, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:VEg

[595] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 54(8):8, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stonebraker:2011:SNE

[596] Michael Stonebraker. Stonebraker on NoSQL and enterprises. *Communications of the ACM*, 54(8):10–11, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Delman:2011:WYS

[597] Scott E. Delman. Why you should be happy to sign in! *Communications of the ACM*, 54(8):12, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2011:NBA

[598] Kirk L. Kroeker. A new benchmark for artificial intelligence. *Communications of the ACM*, 54(8):13–15, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2011:SET

[599] Tom Geller. Supercomputing's exaflop target. *Communications of the ACM*, 54(8):16–18, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2011:LT

[600] Samuel Greengard. Life, translated. *Communications of the ACM*, 54(8):19–21, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cummings:2011:GAW

[601] Jonathon N. Cummings. Geography is alive and well in virtual teams. *Communications of the ACM*, 54(8):24–26, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

DiSalvo:2011:IV

[602] Betsy DiSalvo and Amy Bruckman. From interests to values. *Communications of the ACM*, 54(8):27–29, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bellovin:2011:PSS

[603] S. M. Bellovin, S. O. Bradner, W. Diffie, S. Landau, and J. Rexford. Privacy and security: As simple as possible—but not more so: An assessment of the U.S. government's EINSTEIN project. *Communications of the ACM*, 54(8):30–33, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2011:SS

[604] George V. Neville-Neil. Storage strife. *Communications of the ACM*, 54(8):34–35, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Halpern:2011:JCC

[605] Joseph Y. Halpern and David C. Parkes. Journals for certification, conferences for rapid dissemination. *Communications of the ACM*, 54(8):36–38, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Allman:2011:RPR

[606] Eric Allman. The robustness principle reconsidered. *Communications of the ACM*, 54(8):40–45, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Singh:2011:CP

[607] Satnam Singh. Computing without processors. *Communications of the ACM*, 54(8):46–54, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Eini:2011:PIL

[608] Oren Eini. The pain of implementing LINQ providers. *Communications of the ACM*, 54(8):55–61, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Modha:2011:CC

[609] Dharmendra S. Modha, Rajagopal Ananthanarayanan, Steven K. Esser, Anthony Ndirango, Anthony J. Sherbondy, and Raghavendra Singh. Cognitive computing. *Communications of the ACM*, 54(8):62–71, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cohoon:2011:GCC

[610] J. McGrath Cohoon, Sergey Nigai, and Joseph “Jofish” Kaye. Gender and computing conference papers. *Communications of the ACM*, 54(8):72–80, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

DeAlfaro:2011:RSO

[611] Luca De Alfaro, Ashutosh Kulshreshtha, Ian Pye, and B. Thomas Adler. Reputation systems for open collaboration. *Communications of the ACM*, 54(8):81–87, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chaudhuri:2011:OBI

[612] Surajit Chaudhuri, Umeshwar Dayal, and Vivek Narasayya. An overview of business intelligence technology. *Communications of the ACM*, 54(8):88–98, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Haas:2011:SGS

[613] Peter J. Haas. Sketches get sketchier. *Communications of the ACM*, 54(8): 100, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Li:2011:TAB

[614] Ping Li and Arnd Christian König. Theory and applications of *b*-bit minwise hashing. *Communications of*

the ACM, 54(8):101–109, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Klemmer:2011:SF

[615] Scott Klemmer. Skintroducing the future. *Communications of the ACM*, 54(8):110, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Harrison:2011:SAS

[616] Chris Harrison, Desney Tan, and Dan Morris. Skinput: appropriating the skin as an interactive canvas. *Communications of the ACM*, 54(8):111–118, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2011:LBPe

[617] Peter Winkler. Last byte: Puzzled: Uncommon divisors. *Communications of the ACM*, 54(8):120, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2011:SPI

[618] David Wright. Should privacy impact assessments be mandatory? *Communications of the ACM*, 54(8):121–131, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goel:2011:CCD

[619] Sanjay Goel. Cyberwarfare: connecting the dots in cyber intelligence. *Communications of the ACM*, 54(8):132–140, August 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2011:YTM

[620] Moshe Y. Vardi. Are you talking to me? *Communications of the ACM*, 54(9):5, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:SAP

[621] CACM Staff. Solved, for all practical purposes. *Communications of the ACM*, 54(9):7, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:VEh

[622] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 54(9):9, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wing:2011:JMW

[623] Jeannette M. Wing and Valerie Barr. Jeannette M. Wing @ PCAST; Barbara Liskov keynote. *Communications of the ACM*, 54(9):10–11, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2011:BAD

[624] Kirk L. Kroeker. A breakthrough in algorithm design. *Communications of the ACM*, 54(9):13–15, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2011:IMA

[625] Gary Anthes. Invasion of the mobile apps. *Communications of the ACM*, 54 (9):16–18, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2011:MRM

[626] Samuel Greengard. In memoriam: Robert Morris, 1932–2011. *Communications of the ACM*, 54(9):17, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2011:RAM

[627] Neil Savage. Remaking American medicine. *Communications of the ACM*, 54(9):19–21, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tushnet:2011:RN

[628] Rebecca Tushnet. Remix nation. *Communications of the ACM*, 54(9): 22–24, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Campbell-Kelly:2011:PWW

[629] Martin Campbell-Kelly. In praise of 'Wilkes, Wheeler, and Gill'. *Communications of the ACM*, 54(9):25–27, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Babin:2011:CSR

[630] Ron Babin, Steve Briggs, and Brian Nicholson. Corporate social responsibility and global IT outsourcing. *Communications of the ACM*, 54(9): 28–30, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2011:MTP

[631] Peter J. Denning and Ritu Raj. Managing time, part 2. *Communications of the ACM*, 54(9):31–33, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shneiderman:2011:RVS

[632] Ben Shneiderman, Jennifer Preece, and Peter Pirolli. Realizing the value of social media requires innovative computing research. *Communications of the ACM*, 54(9):34–37, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vixie:2011:ABP

[633] Paul Vixie. Arrogance in business planning. *Communications of the ACM*, 54 (9):38–41, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kamp:2011:MEO

[634] Poul-Henning Kamp. The most expensive one-byte mistake. *Communications of the ACM*, 54(9):42–44, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Creeger:2011:ACR

[635] Mache Creeger. ACM CTO roundtable on mobile devices in the enterprise. *Communications of the ACM*, 54(9): 45–53, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lukasik:2011:PUC

[636] Stephen J. Lukasik. Protecting users of the cyber commons. *Communications of the ACM*, 54(9):54–61, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Partridge:2011:RFW

[637] Craig Partridge. Realizing the future of wireless data communications. *Communications of the ACM*, 54(9): 62–68, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

DeMoura:2011:SMT

[638] Leonardo De Moura and Nikolaj Bjørner. Satisfiability modulo theories: introduction and applications. *Communications of the ACM*, 54(9): 69–77, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bouyer:2011:QAR

[639] Patricia Bouyer, Uli Fahrenberg, Kim G. Larsen, and Nicolas Markey. Quantitative analysis of real-time systems using priced timed automata. *Communications of the ACM*, 54(9): 78–87, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kruegel:2011:MBE

[640] Christopher Kruegel. Making browser extensions secure: technical perspective. *Communications of the ACM*, 54(9):90, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bandhakavi:2011:VBE

[641] Sruthi Bandhakavi, Nandit Tiku, Wyatt Pittman, Samuel T. King, P. Madhusudan, and Marianne Winslett. Vetting browser extensions for security vulnerabilities with VEX. *Communications of the ACM*, 54(9):91–99, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Danvy:2011:AAM

[642] Olivier Danvy and Jan Midtgaard. Abstracting abstract machines: technical perspective. *Communications of the ACM*, 54(9):100, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

VanHorn:2011:AAM

[643] David Van Horn and Matthew Might. Abstracting abstract machines: a systematic approach to higher-order program analysis. *Communications of the ACM*, 54(9):101–109, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2011:LBPf

[644] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 54(9):110, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2011:LBQc

[645] Leah Hoffmann. Last byte: Q&A: Scaling up. *Communications of the ACM*, 54(9):112–ff, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tarafdar:2011:CDS

[646] Monideepa Tarafdar, Qiang Tu, T. S. Ragu-Nathan, and Bhanu S. Ragu-Nathan. Crossing to the dark side: examining creators, outcomes, and inhibitors of technostress. *Communications of the ACM*, 54(9):113–120, September 2011. CODEN CACMA2.

ISSN 0001-0782 (print), 1557-7317 (electronic).

Cantor:2011:CIR

[647] Murray Cantor. Calculating and improving ROI in software and system programs. *Communications of the ACM*, 54(9):121–130, September 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Boisvert:2011:ACP

[648] Ronald F. Boisvert and Jack W. Davidson. ACM's copyright policy. *Communications of the ACM*, 54(10):5–6, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:VEi

[649] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 54(10):7, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Reed:2011:IPH

[650] Daniel Reed and Mark Guzdial. From idea to product: how schools of education can help CS. *Communications of the ACM*, 54(10):8–9, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Delman:2011:ATN

[651] Scott E. Delman. ACM TechNews now available in the Android Market. *Communications of the ACM*, 54(10):10, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2011:IBC

[652] Kirk L. Kroeker. Improving brain-computer interfaces. *Communications of the ACM*, 54(10):11–14, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2011:SE

[653] Tom Geller. Seeing is not enough. *Communications of the ACM*, 54 (10):15–16, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2011:LDW

[654] Samuel Greengard. Living in a digital world. *Communications of the ACM*, 54(10):17–19, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Krakovsky:2011:S

[655] Marina Krakovsky. Success at 16. *Communications of the ACM*, 54(10): 20, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2011:PLD

[656] Michael A. Cusumano. The platform leader's dilemma. *Communications of the ACM*, 54(10):21–24, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2011:FSL

[657] George V. Neville-Neil. File-system litter. *Communications of the ACM*, 54(10):25–26, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Schurmann:2011:MDD

[658] Carsten Schürmann. Modernizing the Danish democratic process. *Communications of the ACM*, 54(10):27–29, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2011:TFS

[659] Phillip G. Armour. Testing: failing to succeed. *Communications of the ACM*, 54(10):30–31, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wallach:2011:RCP

[660] Dan S. Wallach. Rebooting the CS publication process. *Communications of the ACM*, 54(10):32–35, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Nikhil:2011:AHS

[661] Rishiyur S. Nikhil. Abstraction in hardware system design. *Communications of the ACM*, 54(10):36–44, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Meijer:2011:WAL

[662] Erik Meijer. The world according to LINQ. *Communications of the ACM*, 54(10):45–51, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Andersen:2011:VSC

[663] B. Scott Andersen and George Romanski. Verification of safety-critical software. *Communications of the ACM*, 54(10):52–57, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Arquilla:2011:BBM

[664] John Arquilla. From blitzkrieg to bitskrieg: the military encounter with computers. *Communications of the ACM*, 54(10):58–65, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cohen:2011:CJ

[665] Sarah Cohen, James T. Hamilton, and Fred Turner. Computational journalism. *Communications of the ACM*, 54(10):66–71, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fisher:2011:BR

[666] Jasmin Fisher, David Harel, and Thomas A. Henzinger. Biology as reactivity. *Communications of the ACM*, 54(10):72–82, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Moore:2011:PED

[667] Charles Moore. Power efficiency as the #1 design constraint: technical perspective. *Communications of the ACM*, 54(10):84, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hameed:2011:USI

[668] Rehan Hameed, Wajahat Qadeer, Megan Wachs, Omid Azizi, Alex Solomatnikov, Benjamin C. Lee, Stephen Richardson, Christos Kozyrakis, and Mark Horowitz. Understanding sources of inefficiency in general-purpose chips. *Communications of the ACM*, 54

(10):85–93, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hinton:2011:BWL

[669] Geoffrey E. Hinton. A better way to learn features: technical perspective. *Communications of the ACM*, 54(10):94, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lee:2011:ULH

[670] Honglak Lee, Roger Grosse, Rajesh Ranganath, and Andrew Y. Ng. Unsupervised learning of hierarchical representations with convolutional deep belief networks. *Communications of the ACM*, 54(10):95–103, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tomasi:2011:VRT

[671] Carlo Tomasi. Visual reconstruction: technical perspective. *Communications of the ACM*, 54(10):104, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Agarwal:2011:BRD

[672] Sameer Agarwal, Yasutaka Furukawa, Noah Snavely, Ian Simon, Brian Curless, Steven M. Seitz, and Richard Szeliski. Building Rome in a day. *Communications of the ACM*, 54(10):105–112, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Baluja:2011:FT

[673] Shumeet Baluja. Future tense. *Communications of the ACM*, 54(10):120–ff, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gayo-Avello:2011:DTS

[674] Daniel Gayo-Avello. Don't turn social media into another 'Literary Digest' poll. *Communications of the ACM*, 54(10):121–128, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Xu:2011:CM

[675] Zhiwei Xu and Guojie Li. Computing for the masses. *Communications of the ACM*, 54(10):129–137, October 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2011:MP

[676] Moshe Y. Vardi. Is Moore's Party over? *Communications of the ACM*, 54(11):5, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:JJ

[677] CACM Staff. Justice for Jahromi. *Communications of the ACM*, 54(11):6–7, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:VEj

[678] CACM Staff. In the Virtual Extension. *Communications of the ACM*, 54(11):9, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Meyer:2011:SOR

[679] Bertrand Meyer and Greg Linden. In support of open reviews: better

teaching through large-scale data mining. *Communications of the ACM*, 54 (11):12–13, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Delman:2011:AON

[680] Scott E. Delman. ACM offers a new approach to self-archiving. *Communications of the ACM*, 54(11):14, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2011:MCS

[681] Kirk L. Kroeker. Modeling chaotic storms. *Communications of the ACM*, 54(11):15–17, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2011:HC

[682] Alex Wright. Hacking cars. *Communications of the ACM*, 54(11):18–19, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2011:RB

[683] Leah Hoffmann. Risky business. *Communications of the ACM*, 54(11):20–22, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tschofenig:2011:SRN

[684] Hannes Tschofenig. Security risks in next-generation emergency services. *Communications of the ACM*, 54(11): 23–25, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wallsten:2011:WGM

[685] Scott Wallsten. What gets measured gets done. *Communications of the ACM*, 54(11):26–28, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2011:WGB

[686] Pamela Samuelson. Why the Google book settlement failed: and what comes next? *Communications of the ACM*, 54(11):29–31, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Davis:2011:WSE

[687] Michael Davis. Will software engineering ever be engineering? *Communications of the ACM*, 54(11):32–34, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Group:2011:TOF

[688] SIGCSE Teaching-Oriented Faculty Working Group. Teaching-oriented faculty at research universities. *Communications of the ACM*, 54(11):35–37, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Baumann:2011:GDT

[689] Douglas Baumann, Susanne Hambrusch, and Jennifer Neville. Gender demographics trends and changes in U.S. CS departments. *Communications of the ACM*, 54(11):38–42, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kamp:2011:SIP

[690] Poul-Henning Kamp. The software industry is the problem. *Communications of the ACM*, 54(11):44–47, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gong:2011:JSA

[691] Li Gong. Java security architecture revisited. *Communications of the ACM*, 54(11):48–52, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Minsky:2011:OM

[692] Yaron Minsky. OCaml for the masses. *Communications of the ACM*, 54(11): 53–58, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hearst:2011:NSU

[693] Marti A. Hearst. 'natural' search user interfaces. *Communications of the ACM*, 54(11):60–67, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Seo:2011:MAA

[694] DongBack Seo, Albert Boonstra, and Marjolein Offenbeek. Managing IS adoption in ambivalent groups. *Communications of the ACM*, 54(11):68–73, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kennedy:2011:RFH

[695] Ken Kennedy, Charles Koelbel, and Hans Zima. The rise and fall of High Performance Fortran. *Communications of the ACM*, 54(11):74–82, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Akyildiz:2011:NNF

[696] Ian F. Akyildiz, Josep Miquel Jornet, and Massimiliano Pierobon. Nanonetworks: a new frontier in communications. *Communications of the ACM*, 54 (11):84–89, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lampson:2011:MUC

[697] Butler Lampson. Making untrusted code useful: technical perspective. *Communications of the ACM*, 54 (11):92, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Zeldovich:2011:MIF

[698] Nickolai Zeldovich, Silas Boyd-Wickizer, Eddie Kohler, and David Mazières. Making information flow explicit in HiStar. *Communications of the ACM*, 54(11):93–101, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Freeman:2011:PMT

[699] William T. Freeman. A perfect 'match': technical perspective. *Communications of the ACM*, 54(11):102, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Barnes:2011:PRM

[700] Connelly Barnes, Dan B. Goldman, Eli Shechtman, and Adam Finkelstein. The PatchMatch randomized matching algorithm for image manipulation. *Communications of the ACM*, 54(11):

103–110, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2011:LBPg

[701] Peter Winkler. Last byte: Puzzled: Distances between points on the plane. *Communications of the ACM*, 54(11):120, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Garcia-Molina:2011:ISC

[702] Hector Garcia-Molina, Georgia Koutrika, and Aditya Parameswaran. Information seeking: convergence of search, recommendations, and advertising. *Communications of the ACM*, 54(11): 121–130, November 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2011:CH

[703] Moshe Y. Vardi. Computing for humans. *Communications of the ACM*, 54(12):5, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:BPQ

[704] CACM Staff. To boost presentation quality, ask questions. *Communications of the ACM*, 54(12):7, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Langford:2011:CVL

[705] John Langford and Judy Robertson. Conferences and video lectures; scientific educational games. *Communications of the ACM*, 54(12):8–9, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2011:NER

[706] CACM Staff. Nominees for elections and report of the ACM Nominating Committee. *Communications of the ACM*, 54(12):10, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kroeker:2011:RMM

[707] Kirk L. Kroeker. The rise of molecular machines. *Communications of the ACM*, 54(12):11–13, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2011:BNW

[708] Gregory Goth. Brave NUI world. *Communications of the ACM*, 54(12): 14–16, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McCafferty:2011:AVS

[709] Dennis McCafferty. Activism vs. slacktivism. *Communications of the ACM*, 54(12):17–19, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2011:CTH

[710] Samuel Greengard. CSEdWeek takes hold. *Communications of the ACM*, 54(12):20, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2011:DR

[711] Paul Hyman. Dennis Ritchie, 1941–2011. *Communications of the ACM*,

54(12):21, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lanier:2011:MAM

[712] Jaron Lanier. The most ancient marketing. *Communications of the ACM*, 54(12):22–23, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bell:2011:LDI

[713] Genevieve Bell. Life, death, and the iPad: cultural symbols and Steve Jobs. *Communications of the ACM*, 54 (12):24–25, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2011:LSJ

[714] Michael A. Cusumano. The legacy of Steve Jobs. *Communications of the ACM*, 54(12):26–28, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Toyama:2011:THS

[715] Kentaro Toyama. On turbocharged, heat-seeking, robotic fishing poles. *Communications of the ACM*, 54(12): 29–31, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2011:DLS

[716] George V. Neville-Neil. Debugging on live systems. *Communications of the ACM*, 54(12):32–33, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Taylor:2011:DTM

[717] Valerie Taylor and Richard Ladner. Data trends on minorities and people with disabilities in computing. *Communications of the ACM*, 54(12):34–37, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2011:GP

[718] Peter J. Denning. The grounding practice. *Communications of the ACM*, 54 (12):38–40, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bernat:2011:DPR

[719] Andrew Bernat and Eric Grimson. Doctoral program rankings for U.S. computing programs: the National Research Council strikes out. *Communications of the ACM*, 54(12):41–43, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Pacheco:2011:PDD

[720] David Pacheco. Postmortem debugging in dynamic environments. *Communications of the ACM*, 54(12):44–51, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Berriman:2011:HWA

[721] G. Bruce Berriman and Steven L. Groom. How will astronomy archives survive the data tsunami? *Communications of the ACM*, 54(12):52–56, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Green:2011:CGF

[722] Robert Green and Henry Ledgard. Coding guidelines: finding the art in the science. *Communications of the ACM*, 54(12):57–63, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Moore:2011:VCS

[723] Brian E. Moore, Saad Ali, Ramin Mehran, and Mubarak Shah. Visual crowd surveillance through a hydrodynamics lens. *Communications of the ACM*, 54(12):64–73, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sojer:2011:LRA

[724] Manuel Sojer and Joachim Henkel. License risks from ad hoc reuse of code from the Internet. *Communications of the ACM*, 54(12):74–81, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gopalakrishnan:2011:FAM

[725] Ganesh Gopalakrishnan, Robert M. Kirby, Stephen Siegel, Rajeev Thakur, William Gropp, Ewing Lusk, Bronis R. De Supinski, Martin Schulz, and Greg Bronevetsky. Formal analysis of MPI-based parallel programs. *Communications of the ACM*, 54(12): 82–91, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Brewka:2011:ASP

[726] Gerhard Brewka, Thomas Eiter, and Mirosław Truszczyński. Answer set programming at a glance. *Communications of the ACM*, 54(12):92–103, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Leroy:2011:SFT

[727] Xavier Leroy. Safety first!: technical perspective. *Communications of the ACM*, 54(12):122, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Yang:2011:SLI

[728] Jean Yang and Chris Hawblitzel. Safe to the last instruction: automated verification of a type-safe operating system. *Communications of the ACM*, 54 (12):123–131, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shmatikov:2011:APT

[729] Vitaly Shmatikov. Anonymity is not privacy: technical perspective. *Communications of the ACM*, 54(12):132, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Backstrom:2011:WAT

[730] Lars Backstrom, Cynthia Dwork, and Jon Kleinberg. Wherefore art thou R3579X?: anonymized social networks, hidden patterns, and structural steganography. *Communications of the ACM*, 54(12):133–141, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2011:LBPh

[731] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 54(12):142, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2011:LBQd

[732] Leah Hoffmann. Last byte: Q&A: Scaling up: M. Frans Kaashoek talks about multicore computing, security, and operating system design. *Communications of the ACM*, 54(12):144, 143, December 2011. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2012:AIP

[733] Moshe Y. Vardi. Artificial intelligence: past and future. *Communications of the ACM*, 55(1):5, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2012:SEE

[734] CACM Staff. Software engineering is engineering. *Communications of the ACM*, 55(1):6–7, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chesnais:2012:APL

[735] Alain Chesnais. ACM President's letter. *Communications of the ACM*, 55(1):8, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chesnais:2012:AAR

[736] Alain Chesnais. ACM's annual report. *Communications of the ACM*, 55(1):9–13, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2012:UCS

[737] Mark Guzdial and Bertrand Meyer. Understanding CS1 students; defective software. *Communications of the ACM*, 55(1):14–15, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Delman:2012:EWA

[738] Scott Delman. eBooks will abound in the ACM Digital Library. *Communications of the ACM*, 55(1):16, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2012:BMT

[739] Neil Savage. Better medicine through machine learning. *Communications of the ACM*, 55(1):17–19, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2012:RSP

[740] Gary Anthes. Revamping storage performance. *Communications of the ACM*, 55(1):20–22, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2012:LD

[741] Samuel Greengard. Law and disorder. *Communications of the ACM*, 55(1):23–25, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Underwood:2012:CT

[742] Sarah Underwood. Celebration time. *Communications of the ACM*, 55(1): 26, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2012:AAP

[743] Alex Wright. Analyzing Apple products. *Communications of the ACM*,

55(1):27, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2012:JM

[744] Paul Hyman. John McCarthy, 1927–2011. *Communications of the ACM*, 55(1):28–29, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Picker:2012:YYC

[745] Randal C. Picker. The yin and yang of copyright and technology. *Communications of the ACM*, 55(1):30–32, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2012:DE

[746] Phillip G. Armour. The difference engine. *Communications of the ACM*, 55(1):33–34, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Haigh:2012:IPB

[747] Thomas Haigh. The IBM PC: from beige box to industry standard. *Communications of the ACM*, 55(1):35–37, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Olsen:2012:IOU

[748] Kai A. Olsen and Alessio Malizia. Interfaces for the ordinary user: can we hide too much? *Communications of the ACM*, 55(1):38–40, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Frana:2012:ISC

[749] Philip L. Frana. An interview with Stephen A. Cook. *Communications of the ACM*, 55(1):41–46, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Flatt:2012:CLR

[750] Matthew Flatt. Creating languages in Racket. *Communications of the ACM*, 55(1):48–56, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gettys:2012:BDB

[751] Jim Gettys and Kathleen Nichols. Bufferbloat: dark buffers in the Internet. *Communications of the ACM*, 55(1):57–65, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Waldspurger:2012:V

[752] Carl Waldspurger and Mendel Rosenblum. I/O virtualization. *Communications of the ACM*, 55(1):66–73, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hong:2012:SPA

[753] Jason Hong. The state of phishing attacks. *Communications of the ACM*, 55(1):74–81, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Coulson:2012:FEW

[754] Geoff Coulson, Barry Porter, Ioannis Chatzigiannakis, Christos Koninis, Stefan Fischer, Dennis Pfisterer, Daniel Bimschas, Torsten Braun, Philipp

Hurni, Markus Anwander, Gerald Wagenknecht, Sándor P. Fekete, Alexander Kröller, and Tobias Baumgartner. Flexible experimentation in wireless sensor networks. *Communications of the ACM*, 55(1):82–90, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Laih:2012:LTC

[755] Chi-Sung Laih, Shang-Ming Jen, and Chia-Yu Lu. Long-term confidentiality of PKI. *Communications of the ACM*, 55(1):91–95, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Manduchi:2012:CVS

[756] Roberto Manduchi and James Coughlan. (computer) vision without sight. *Communications of the ACM*, 55(1): 96–104, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Durand:2012:WDP

[757] Frédo Durand. Where do people draw lines?: technical perspective. *Communications of the ACM*, 55(1):106, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cole:2012:WDP

[758] Forrester Cole, Aleksey Golovinskiy, Alex Limpaecher, Heather Stoddart Barros, Adam Finkelstein, Thomas Funkhouser, and Szymon Rusinkiewicz. Where do people draw lines? *Communications of the ACM*, 55(1):107–115, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kurose:2012:CCN

[759] Jim Kurose. Content-centric networking: technical perspective. *Communications of the ACM*, 55(1):116, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jacobson:2012:NNC

[760] Van Jacobson, Diana K. Smetters, James D. Thornton, Michael Plass, Nick Briggs, and Rebecca Braynard. Networking named content. *Communications of the ACM*, 55(1):117–124, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wilson:2012:FT

[761] Daniel H. Wilson. Future tense. *Communications of the ACM*, 55(1):136–ff, January 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gagliardi:2012:RAE

[762] Fabrizio Gagliardi. Revisiting ACM Europe. *Communications of the ACM*, 55(2):5, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Brooke:2012:LCN

[763] Phil Brooke and Vladik Kreinovich. Letters: Credit non-anonymous reviewers with a name. *Communications of the ACM*, 55(2):6–7, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Paulson:2012:LWL

[764] Lawrence C. Paulson and Poul-Henning Kamp. Letters: What liability

for faulty software? *Communications of the ACM*, 55(2):6–7, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Joyner:2012:LSJ

[765] Ian Joyner. Letters: The [Steve] Jobs factor. *Communications of the ACM*, 55(2):6–7, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Schau:2012:LGM

[766] August Schau and Charles H. Lindsey. Letters: Give me competent communication. *Communications of the ACM*, 55(2):6–7, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stonebraker:2012:RBD

[767] Michael Stonebraker and Jason Hong. Researchers' big data crisis; understanding design and functionality. *Communications of the ACM*, 55 (2):10–11, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2012:SBS

[768] Gregory Goth. The science of better science. *Communications of the ACM*, 55(2):13–15, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2012:WAB

[769] Samuel Greengard. The war against botnets. *Communications of the ACM*, 55(2):16–18, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2012:SLR

[770] Alex Wright. The social life of robots. *Communications of the ACM*, 55(2):19–21, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2012:AFI

[771] CACM Staff. ACM Fellows inducted. *Communications of the ACM*, 55(2): 23, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosston:2012:IA

[772] Gregory Rosston. Incentive auctions. *Communications of the ACM*, 55(2):24–26, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Simon:2012:PIT

[773] Beth Simon and Quintin Cutts. Peer instruction: a teaching method to foster deep understanding. *Communications of the ACM*, 55(2):27–29, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Norman:2012:YAT

[774] Donald A. Norman. Yet another technology cusp: confusion, vendor wars, and opportunities. *Communications of the ACM*, 55(2):30–32, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2012:WAD

[775] George V. Neville-Neil. Wanton acts of debuggery. *Communications of the ACM*, 55(2):33–34, February 2012.

CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McDermott:2012:ES

[776] Rose McDermott. Emotion and security. *Communications of the ACM*, 55(2):35–37, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Zelkowitz:2012:WWL

[777] Marvin V. Zelkowitz. What have we learned about software engineering? *Communications of the ACM*, 55(2):38–39, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2012:BWW

[778] Vint Cerf, Van Jacobson, Nick Weaver, and Jim Gettys. BufferBloat: what's wrong with the Internet? *Communications of the ACM*, 55(2):40–47, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Boehm:2012:YDK

[779] Hans-J. Boehm and Sarita V. Adve. You don't know jack about shared variables or memory models. *Communications of the ACM*, 55(2):48–54, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Oliner:2012:ACL

[780] Adam Oliner, Archana Ganapathi, and Wei Xu. Advances and challenges in log analysis. *Communications of the ACM*, 55(2):55–61, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Evangelopoulos:2012:TMV

[781] Nicholas Evangelopoulos and Lucian Visinescu. Text-mining the voice of the people. *Communications of the ACM*, 55(2):62–69, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoos:2012:PO

[782] Holger H. Hoos. Programming by optimization. *Communications of the ACM*, 55(2):70–80, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Allen:2012:SSD

[783] Bryce Allen, John Bresnahan, Lisa Childers, Ian Foster, Gopi Kandaswamy, Raj Kettimuthu, Jack Kordas, Mike Link, Stuart Martin, Karl Pickett, and Steven Tuecke. Software as a service for data scientists. *Communications of the ACM*, 55(2):81–88, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Faezipour:2012:PCI

[784] Miad Faezipour, Mehrdad Nourani, Adnan Saeed, and Sateesh Addepalli. Progress and challenges in intelligent vehicle area networks. *Communications of the ACM*, 55(2):90–100, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bodik:2012:CWH

[785] Rastislav Bodik. Compiling what to how: technical perspective. *Communications of the ACM*, 55(2):102, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kuncak:2012:SSP

[786] Viktor Kuncak, Mikaël Mayer, Ruzica Piskac, and Philippe Suter. Software synthesis procedures. *Communications of the ACM*, 55(2):103–111, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vempala:2012:MHD

[787] Santosh S. Vempala. Modeling high-dimensional data: technical perspective. *Communications of the ACM*, 55(2):112, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kalai:2012:DG

[788] Adam Tauman Kalai, Ankur Moitra, and Gregory Valiant. Disentangling Gaussians. *Communications of the ACM*, 55(2):113–120, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2012:LBPa

[789] Peter Winkler. Last byte: Puzzled: Where sets meet (Venn diagrams). *Communications of the ACM*, 55(2):128, February 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2012:WAa

[790] Moshe Y. Vardi. What is an algorithm? *Communications of the ACM*, 55(3):5, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2012:SSA

[791] CACM Staff. From syntax to semantics for AI. *Communications of the ACM*, 55(3):6–7, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Meyer:2012:KB

[792] Bertrand Meyer. Knowledgeable beginners. *Communications of the ACM*, 55(3):10–11, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2012:GWC

[793] Neil Savage. Gaining wisdom from crowds. *Communications of the ACM*, 55(3):13–15, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2012:CM

[794] Gary Anthes. Computing with magnets. *Communications of the ACM*, 55(3):16–18, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2012:PF

[795] Samuel Greengard. Policing the future. *Communications of the ACM*, 55(3):19–21, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2012:SSG

[796] Paul Hyman. Stanford schooling—gratis! *Communications of the ACM*, 55(3):22, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosenberger:2012:CSA

[797] Jack Rosenberger. Computer science awards. *Communications of the*

ACM, 55(3):23, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lin:2012:WCE

[798] Patrick Lin, Fritz Allhoff, and Neil C. Rowe. War 2.0: cyberweapons and ethics. *Communications of the ACM*, 55(3):24–26, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2012:LSD

[799] Pamela Samuelson. Legally speaking: Do software copyrights protect what programs do? *Communications of the ACM*, 55(3):27–29, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2012:VPI

[800] Peter J. Denning. Viewpoint: The profession of IT: The idea idea. *Communications of the ACM*, 55(3):30–32, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kostakos:2012:VTU

[801] Vassilis Kostakos. Viewpoint: Training users vs. training soldiers: experiences from the battlefield. *Communications of the ACM*, 55(3):33–35, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Malizia:2012:VAN

[802] Alessio Malizia and Andrea Bellucci. Viewpoint: The artificiality of natural user interfaces. *Communications of the ACM*, 55(3):36–38, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Godefroid:2012:SWF

[803] Patrice Godefroid, Michael Y. Levin, and David Molnar. SAGE: whitebox fuzzing for security testing. *Communications of the ACM*, 55(3):40–44, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rizzo:2012:RNA

[804] Luigi Rizzo. Revisiting network I/O APIs: the netmap framework. *Communications of the ACM*, 55(3):45–51, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kamp:2012:HTP

[805] Poul-Henning Kamp. The hyperdimensional tar pit. *Communications of the ACM*, 55(3):52–53, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lee:2012:MMC

[806] Youngki Lee, S. S. Iyengar, Chulhong Min, Younghyun Ju, Seungwoo Kang, Taiwoo Park, Jinwon Lee, Yunseok Rhee, and Junehwa Song. MobiCon: a mobile context-monitoring platform. *Communications of the ACM*, 55(3):54–65, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kim:2012:CSC

[807] Seung Hyun Kim, Qiu-Hong Wang, and Johannes B. Ullrich. A comparative study of cyberattacks. *Communications of the ACM*, 55(3):66–73, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cooper:2012:TTM

[808] S. Barry Cooper. Turing's Titanic machine? *Communications of the ACM*, 55(3):74–83, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Huang:2012:NGG

[809] J. Y. Huang, C. H. Tsai, and S. T. Huang. The next generation of GPS navigation systems. *Communications of the ACM*, 55(3):84–93, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gribble:2012:BCB

[810] Steven D. Gribble. The benefits of capability-based protection: technical perspective. *Communications of the ACM*, 55(3):96, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Watson:2012:TCP

[811] Robert N. M. Watson, Jonathan Anderson, Ben Laurie, and Kris Kennaway. A taste of Capsicum: practical capabilities for UNIX. *Communications of the ACM*, 55(3):97–104, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Littman:2012:NWS

[812] Michael L. Littman. A new way to search game trees: technical perspective. *Communications of the ACM*, 55(3):105, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gelly:2012:GCC

[813] Sylvain Gelly, Levente Kocsis, Marc Schoenauer, Michèle Sebag, David Silver, Csaba Szepesvári, and Olivier Teytaud. The grand challenge of computer Go: Monte Carlo tree search and extensions. *Communications of the ACM*, 55(3):106–113, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2012:LBPb

[814] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 55(3):118, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2012:QCS

[815] Leah Hoffmann. Q&A: Chief strategiest. *Communications of the ACM*, 55(3):120–ff, March 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Liu:2012:ACC

[816] Yunhao Liu and Vincent Shen. ACM China Council. *Communications of the ACM*, 55(4):5, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2012:BS

[817] CACM Staff. The beauty of simplicity. *Communications of the ACM*, 55(4): 6–7, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Reed:2012:PCD

[818] Daniel Reed and Mark Guzdial. The power of computing; design guidelines

in CS education. *Communications of the ACM*, 55(4):8–9, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2012:PDD

[819] Gregory Goth. Preserving digital data. *Communications of the ACM*, 55(4):11–13, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2012:TM

[820] Tom Geller. Talking to machines. *Communications of the ACM*, 55(4):14–16, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2012:OB

[821] Leah Hoffmann. Open for business. *Communications of the ACM*, 55(4):17–19, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2012:CSP

[822] Michael A. Cusumano. Can services and platform thinking help the U.S. Postal Service? *Communications of the ACM*, 55(4):21–23, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Heeks:2012:ITG

[823] Richard Heeks. Information technology and gross national happiness. *Communications of the ACM*, 55(4):24–26, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2012:NPB

[824] George V. Neville-Neil. The network protocol battle. *Communications of the ACM*, 55(4):27–28, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ross:2012:IGC

[825] Jill Ross, Elizabeth Litzler, J. McGrath Cohoon, and Lucy Sanders. Improving gender composition in computing. *Communications of the ACM*, 55(4):29–31, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tekir:2012:RCC

[826] Selma Tekir. Reading CS classics. *Communications of the ACM*, 55(4):32–34, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Soper:2012:HMT

[827] Daniel Soper. Is human mobility tracking a good idea? *Communications of the ACM*, 55(4):35–37, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Beckman:2012:WLM

[828] Brian Beckman. Why LINQ matters: cloud composability guaranteed. *Communications of the ACM*, 55(4):38–44, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Heer:2012:IDV

[829] Jeffrey Heer and Ben Shneiderman. Interactive dynamics for visual analysis. *Communications of the ACM*,

55(4):45–54, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Danowitz:2012:CDR

[830] Andrew Danowitz, Kyle Kelley, James Mao, John P. Stevenson, and Mark Horowitz. CPU DB: recording microprocessor history. *Communications of the ACM*, 55(4):55–63, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Schmettow:2012:SSU

[831] Martin Schmettow. Sample size in usability studies. *Communications of the ACM*, 55(4):64–70, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Williams:2012:WAT

[832] Laurie Williams. What agile teams think of agile principles. *Communications of the ACM*, 55(4):71–76, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Blei:2012:PTM

[833] David M. Blei. Probabilistic topic models. *Communications of the ACM*, 55(4):77–84, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ramchurn:2012:PSS

[834] Sarvapali D. Ramchurn, Perukrishnen Vytelingum, Alex Rogers, and Nicholas R. Jennings. Putting the 'smarts' into the smart grid: a grand challenge for artificial intelligence. *Communications of the ACM*, 55(4):86–97, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Manocha:2012:BRD

[835] Dinesh Manocha. Building robust dynamical simulation systems: technical perspective. *Communications of the ACM*, 55(4):101, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Harmon:2012:ACM

[836] David Harmon, Etienne Vouga, Breannan Smith, Rasmus Tamstorf, and Eitan Grinspun. Asynchronous contact mechanics. *Communications of the ACM*, 55(4):102–109, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chi:2012:WKS

[837] Ed H. Chi. Who knows?: searching for expertise on the social web: technical perspective. *Communications of the ACM*, 55(4):110, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Horowitz:2012:SVM

[838] Damon Horowitz and Sepandar D. Kamvar. Searching the village: models and methods for social search. *Communications of the ACM*, 55(4):111–118, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Clegg:2012:FT

[839] Brian Clegg. Future tense. *Communications of the ACM*, 55(4):120–ff, April 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2012:FA

[840] Moshe Y. Vardi. Fair access. *Communications of the ACM*, 55(5):5, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Robertson:2012:LTS

[841] Judy Robertson. Likert-type scales, statistical methods, and effect sizes. *Communications of the ACM*, 55(5):6–7, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2012:ASD

[842] Neil Savage. Automating scientific discovery. *Communications of the ACM*, 55(5):9–11, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2012:RLU

[843] Alex Wright. Robots like us. *Communications of the ACM*, 55(5):12–13, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2012:DP

[844] Samuel Greengard. Digitally possessed. *Communications of the ACM*, 55(5):14–16, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2012:WR

[845] Paul Hyman. A workshop revival. *Communications of the ACM*, 55(5):17, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Segal:2012:AGE

[846] Gerald Segal. ACM's 2012 general election. *Communications of the ACM*, 55(5):19–29, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Menell:2012:DS

[847] Peter S. Menell. Design for symbiosis. *Communications of the ACM*, 55(5):30–32, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anderson:2012:FP

[848] David Anderson. The future of the past. *Communications of the ACM*, 55(5):33–34, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Waldfogel:2012:DCS

[849] Joel Waldfogel. Digitization and copyright: some recent evidence from music. *Communications of the ACM*, 55(5):35–37, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Repenning:2012:PGB

[850] Alexander Repenning. Programming goes back to school. *Communications of the ACM*, 55(5):38–40, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bernstein:2012:PGB

[851] Abraham Bernstein, Mark Klein, and Thomas W. Malone. Programming the global brain. *Communications of the ACM*, 55(5):41–43, May 2012. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fox:2012:CSE

[852] Armando Fox and David Patterson. Crossing the software education chasm. *Communications of the ACM*, 55(5): 44–49, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Allman:2012:MTD

[853] Eric Allman. Managing technical debt. *Communications of the ACM*, 55(5):50–55, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Helland:2012:IMC

[854] Pat Helland. Idempotence is not a medical condition. *Communications of the ACM*, 55(5):56–65, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Meijer:2012:YMD

[855] Erik Meijer. Your mouse is a database. *Communications of the ACM*, 55(5): 66–73, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Choudhary:2012:SME

[856] Alok Choudhary, William Hendrix, Kathy Lee, Diana Palsetia, and Wei-Keng Liao. Social media evolution of the Egyptian revolution. *Communications of the ACM*, 55(5):74–80, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Soper:2012:GAC

[857] Daniel S. Soper and Ofir Turel. An n-gram analysis of Communications 2000–2010. *Communications of the ACM*, 55(5):81–87, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Atias:2012:CAP

[858] Nir Atias and Roded Sharan. Comparative analysis of protein networks: hard problems, practical solutions. *Communications of the ACM*, 55(5):88–97, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gropp:2012:BAB

[859] William Gropp. Best algorithms + best computers = powerful match. *Communications of the ACM*, 55(5):100, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lashuk:2012:MPA

[860] Ilya Lashuk, Aparna Chandramowlishwaran, Harper Langston, Tuan-Anh Nguyen, Rahul Sampath, Aashay Shringarpure, Richard Vuduc, Lexing Ying, Denis Zorin, and George Biros. A massively parallel adaptive fast multipole method on heterogeneous architectures. *Communications of the ACM*, 55(5):101–109, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hand:2012:ED

[861] Steven Hand. An experiment in determinism. *Communications of the ACM*, 55(5):110, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Aviram:2012:ESE

[862] Amittai Aviram, Shu-Chun Weng, Sen Hu, and Bryan Ford. Efficient system-enforced deterministic parallelism. *Communications of the ACM*, 55(5):111–119, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2012:LBPc

[863] Peter Winkler. Last byte: Puzzled: Designs on square grids. *Communications of the ACM*, 55(5):120, May 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Spafford:2012:UUL

[864] Eugene H. Spafford. USACM and U.S. legislation. *Communications of the ACM*, 55(6):5, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2012:HPC

[865] CACM Staff. The halting problem in the clear light of probability. *Communications of the ACM*, 55(6):6–7, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hong:2012:PAD

[866] Jason Hong and Greg Linden. Protecting against data breaches; living with mistakes. *Communications of the ACM*, 55(6):10–11, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Delman:2012:DTB

[867] Scott E. Delman. Don't throw the baby out with the bathwater. *Communications of the ACM*, 55(6):12, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2012:AMD

[868] Gregory Goth. Analyzing medical data. *Communications of the ACM*, 55(6):13–15, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2012:SP

[869] Gary Anthes. Smarter photography. *Communications of the ACM*, 55(6):16–18, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2012:DMM

[870] Leah Hoffmann. Data mining meets city hall. *Communications of the ACM*, 55(6):19–21, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2012:GC

[871] Neil Savage. Game changer. *Communications of the ACM*, 55(6):22–23, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2012:IT

[872] Paul Hyman. An influential theoretician. *Communications of the ACM*, 55(6):24, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2012:MC

[873] Phillip G. Armour. A measure of control. *Communications of the ACM*, 55(6):26–28, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Garfinkel:2012:CR

[874] Simson L. Garfinkel. The cybersecurity risk. *Communications of the ACM*, 55(6):29–32, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2012:SF

[875] George V. Neville-Neil. Scale failure. *Communications of the ACM*, 55(6):33–34, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hall:2012:SIK

[876] Chris Hall. Security of the Internet and the known unknowns. *Communications of the ACM*, 55(6):35–37, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2012:MEP

[877] Peter J. Denning and Nicholas Dew. The myth of the elevator pitch. *Communications of the ACM*, 55(6):38–40, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lin:2012:WCS

[878] Herbert Lin. Why computer scientists should care about cyber conflict and U.S. national security policy. *Communications of the ACM*, 55(6):41–43, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Abts:2012:GTD

[879] Dennis Abts and Bob Felderman. A guided tour of data-center networking. *Communications of the ACM*, 55(6):44–51, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Crandall:2012:MPP

[880] David Crandall and Noah Snavely. Modeling people and places with Internet photo collections. *Communications of the ACM*, 55(6):52–60, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Pulli:2012:RTC

[881] Kari Pulli, Anatoly Baksheev, Kirill Kornyakov, and Victor Eruhimov. Real-time computer vision with OpenCV. *Communications of the ACM*, 55(6):61–69, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Doer:2012:WRS

[882] Benjamin Doer, Mahmoud Fouz, and Tobias Friedrich. Why rumors spread so quickly in social networks. *Communications of the ACM*, 55(6):70–75, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Parno:2012:TEC

[883] Bryan Parno. Trust extension for commodity computers. *Communications of the ACM*, 55(6):76–85, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Carey:2012:DS

[884] Michael J. Carey, Nicola Onose, and Michalis Petropoulos. Data services. *Communications of the ACM*, 55(6): 86–97, June 2012. CODEN CACMA2.

ISSN 0001-0782 (print), 1557-7317 (electronic).

Mulmuley:2012:GPT

[885] Ketan D. Mulmuley. The GCT program toward the P vs. NP problem. *Communications of the ACM*, 55(6):98–107, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Parrilo:2012:RUB

[886] Pablo A. Parrilo. Reconstructing the unknown, balancing structure and uncertainty: technical perspective. *Communications of the ACM*, 55(6):110, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Candes:2012:EMC

[887] Emmanuel Candès and Benjamin Recht. Exact matrix completion via convex optimization. *Communications of the ACM*, 55(6):111–119, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lee:2012:FHT

[888] Peter Lee. The fox and the hedgehog: technical perspective. *Communications of the ACM*, 55(6):120, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rompf:2012:LMS

[889] Tiark Rompf and Martin Odersky. Lightweight modular staging: a pragmatic approach to runtime code generation and compiled DSLs. *Communications of the ACM*, 55(6):121–130, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2012:LBPd

[890] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 55(6):133, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2012:LBQ

[891] Leah Hoffmann. Last byte: Q&A: a sure thing. *Communications of the ACM*, 55(6):136, 135, June 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2012:PSP

[892] Moshe Y. Vardi. Predatory scholarly publishing. *Communications of the ACM*, 55(7):5, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2012:INC

[893] CACM Staff. An integral number and its consequences. *Communications of the ACM*, 55(7):7–8, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2012:CPC

[894] Mark Guzdial and Judy Robertson. CS and popular culture; learning from console games. *Communications of the ACM*, 55(7):10–11, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2012:DS

[895] Gregory Goth. Degrees of separation. *Communications of the ACM*, 55(7):13–15, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2012:HLW

[896] Gary Anthes. HTML5 leads a Web revolution. *Communications of the ACM*, 55(7):16–17, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Krakovsky:2012:PI

[897] Marina Krakovsky. Patently inadequate. *Communications of the ACM*, 55(7):18–20, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2012:LF

[898] Paul Hyman. Lost and found. *Communications of the ACM*, 55(7):21, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sako:2012:BMS

[899] Mari Sako. Business models for strategy and innovation. *Communications of the ACM*, 55(7):22–24, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2012:COP

[900] Pamela Samuelson. Can online piracy be stopped by laws? *Communications of the ACM*, 55(7):25–27, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Watson:2012:ISE

[901] R. T. Watson, J. Corbett, M. C. Boudreau, and J. Webster. An information strategy for environmental sustainability. *Communications of the ACM*, 55(7):28–30, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Campbell-Kelly:2012:ATO

[902] Martin Campbell-Kelly. Alan Turing's other universal machine. *Communications of the ACM*, 55(7):31–33, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Spector:2012:GHA

[903] Alfred Spector, Peter Norvig, and Slav Petrov. Google's hybrid approach to research. *Communications of the ACM*, 55(7):34–37, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Spiekermann:2012:CPD

[904] Sarah Spiekermann. The challenges of privacy by design. *Communications of the ACM*, 55(7):38–40, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Nichols:2012:CQD

[905] Kathleen Nichols and Van Jacobson. Controlling queue delay. *Communications of the ACM*, 55(7):42–50, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kamp:2012:MCD

[906] Poul-Henning Kamp. My compiler does not understand me. *Communications of the ACM*, 55(7):51–53, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bouwers:2012:GWY

[907] Eric Bouwers, Joost Visser, and Arie van Deursen. Getting what you measure. *Communications of the ACM*, 55(7):54–59, July 2012. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Abello:2012:CF

[908] James Abello, Peter Broadwell, and Timothy R. Tangherlini. Computational folkloristics. *Communications of the ACM*, 55(7):60–70, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sommerville:2012:LSC

[909] Ian Sommerville, Dave Cliff, Radu Calinescu, Justin Keen, Tim Kelly, Marta Kwiatkowska, John Mcdermid, and Richard Paige. Large-scale complex IT systems. *Communications of the ACM*, 55(7):71–77, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Martin:2012:WCC

[910] Milo M. K. Martin, Mark D. Hill, and Daniel J. Sorin. Why on-chip cache coherence is here to stay. *Communications of the ACM*, 55(7):78–89, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Harel:2012:BP

[911] David Harel, Assaf Marron, and Gera Weiss. Behavioral programming. *Communications of the ACM*, 55(7):90–100, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Patterson:2012:BWB

[912] David Patterson. For better or worse, benchmarks shape a field: technical perspective. *Communications of the ACM*, 55(7):104, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Esmaeilzadeh:2012:LBL

[913] Hadi Esmaeilzadeh, Ting Cao, Xi Yang, Stephen M. Blackburn, and Kathryn S. McKinley. Looking back and looking forward: power, performance, and upheaval. *Communications of the ACM*, 55(7):105–114, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fiat:2012:WSP

[914] Amos Fiat. Why study the price of anarchy?: technical perspective. *Communications of the ACM*, 55(7):115, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roughgarden:2012:IRP

[915] Tim Roughgarden. Intrinsic robustness of the price of anarchy. *Communications of the ACM*, 55(7):116–123, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

MacLeod:2012:FTT

[916] Ken MacLeod. Future tense: They just click. *Communications of the ACM*, 55(7):128–ff, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Swinarski:2012:DSI

[917] Matthew Swinarski, Diane H. Parente, and Rajiv Kishore. Do small IT firms benefit from higher process capability? *Communications of the ACM*, 55(7):129–134, July 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Poucher:2012:GSC

[918] Bill Poucher. Giving students the competitive edge. *Communications of the ACM*, 55(8):5, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2012:CTC

[919] CACM Staff. Composable trees for configurable behavior. *Communications of the ACM*, 55(8):7, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Langford:2012:MLA

[920] John Langford and Ruben Ortega. Machine learning and algorithms: agile development. *Communications of the ACM*, 55(8):10–11, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kanipe:2012:CS

[921] Jeff Kanipe. Cosmic simulations. *Communications of the ACM*, 55(8):13–15, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2012:DSC

[922] Tom Geller. DARPA Shredder challenge solved. *Communications of the ACM*, 55(8):16–17, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2012:AGP

[923] Samuel Greengard. Advertising gets personal. *Communications of the ACM*, 55(8):18–20, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Frenkel:2012:BH

[924] Karen A. Frenkel. Broader horizons. *Communications of the ACM*, 55(8):21, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tjia:2012:IHK

[925] Paul Tjia. Inside the hermit kingdom: IT and outsourcing in North Korea. *Communications of the ACM*, 55(8):22–25, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Martin:2012:WMO

[926] Fred G. Martin. Will massive open online courses change how we teach? *Communications of the ACM*, 55 (8):26–28, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Boyd:2012:PRN

[927] Danah Boyd. The politics of "real names". *Communications of the ACM*, 55(8):29–31, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2012:SP

[928] George V. Neville-Neil. A system is not a product. *Communications of the ACM*, 55(8):32–33, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Forman:2012:IEP

[929] Chris Forman, Avi Goldfarb, and Shane Greenstein. The Internet is everywhere, but the payoff is not. *Communications of the ACM*, 55(8):34–35,

August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Olsen:2012:IEU

[930] Kai A. Olsen and Hans Fredrik Nordhaug. Internet elections: unsafe in any home? *Communications of the ACM*, 55(8):36–38, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McBride:2012:ESE

[931] Neil McBride. The ethics of software engineering should be an ethics for the client. *Communications of the ACM*, 55(8):39–41, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Limoncelli:2012:ORN

[932] Thomas A. Limoncelli. OpenFlow: a radical new idea in networking. *Communications of the ACM*, 55(8):42–47, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Polanczyk:2012:ESS

[933] Rafael Vanoni Polanczyk. Extending the semantics of scheduling priorities. *Communications of the ACM*, 55(8):48–52, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Serrano:2012:MPH

[934] Manuel Serrano and Gérard Berry. Multitier programming in Hop. *Communications of the ACM*, 55(8):53–59, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wicker:2012:LLP

[935] Stephen B. Wicker. The loss of location privacy in the cellular age. *Communications of the ACM*, 55(8):60–68, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

DeSutter:2012:CCS

[936] Bjorn De Sutter and Äaron Van Den Oord. To be or not to be cited in computer science. *Communications of the ACM*, 55(8):69–75, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

VanDerAalst:2012:PM

[937] Wil Van Der Aalst. Process mining. *Communications of the ACM*, 55(8):76–83, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Aaronson:2012:QM

[938] Scott Aaronson, Edward Farhi, David Gosset, Avinatan Hassidim, Jonathan Kelner, and Andrew Lutomirski. Quantum money. *Communications of the ACM*, 55(8):84–92, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rinard:2012:EDP

[939] Martin C. Rinard. Example-driven program synthesis for end-user programming: technical perspective. *Communications of the ACM*, 55(8):96, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gulwani:2012:SDM

[940] Sumit Gulwani, William R. Harris, and Rishabh Singh. Spreadsheet data manipulation using examples. *Communications of the ACM*, 55(8):97–105, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Zeller:2012:PPC

[941] Andreas Zeller. Proving programs continuous: technical perspective. *Communications of the ACM*, 55(8):106, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chaudhuri:2012:CRP

[942] Swarat Chaudhuri, Sumit Gulwani, and Roberto Lublinerman. Continuity and robustness of programs. *Communications of the ACM*, 55(8):107–115, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2012:LBPe

[943] Peter Winkler. Last byte: Puzzled: Find the magic set. *Communications of the ACM*, 55(8):120, August 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2012:WAb

[944] Moshe Y. Vardi. Why ACM? *Communications of the ACM*, 55(9):5, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2012:OPD

[945] CACM Staff. Operationalizing privacy by design. *Communications of the ACM*, 55(9):7, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Meyer:2012:IRV

[946] Bertrand Meyer. Incremental research vs. paradigm-shift mania. *Communications of the ACM*, 55(9):8–9, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2012:ALC

[947] Gregory Goth. Atomic-level computing. *Communications of the ACM*, 55 (9):11–13, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2012:CGU

[948] Gary Anthes. Chips go upscale. *Communications of the ACM*, 55(9): 14–16, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Krakovsky:2012:GI

[949] Marina Krakovsky. Garbage in, info out. *Communications of the ACM*, 55 (9):17–19, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2012:HAT

[950] Paul Hyman. In honor of Alan Turing. *Communications of the ACM*, 55 (9):20–23, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Haigh:2012:SLB

[951] Thomas Haigh. Seven lessons from bad history. *Communications of the ACM*, 55(9):26–29, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2012:DFB

[952] Peter J. Denning. Don't feel bad if you can't predict the future. *Communications of the ACM*, 55(9):30–32, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Zarsky:2012:APP

[953] Tal Z. Zarsky. Automated prediction: perception, law, and policy. *Communications of the ACM*, 55(9): 33–35, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ladner:2012:NBI

[954] Richard E. Ladner and Elizabeth Litzler. The need to balance innovation and implementation in broadening participation. *Communications of the ACM*, 55(9):36–38, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Marcos:2012:AOW

[955] Esperanza Marcos, Juan Manuel Vara, and Valeria de Castro. Author order: what science can learn from the arts. *Communications of the ACM*, 55 (9):39–41, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Papadimitriou:2012:APA

[956] Christos H. Papadimitriou. Alan and I: a personal account of Alan Turing's life and impact. *Communications of the ACM*, 55(9):42–43, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chisnall:2012:NOC

[957] David Chisnall. A new Objective-C runtime: from research to production. *Communications of the ACM*, 55 (9):44–47, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Berger:2012:SNS

[958] Emery D. Berger. Software needs seatbelts and airbags. *Communications of the ACM*, 55(9):48–53, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Meijer:2012:AYD

[959] Erik Meijer. All your database are belong to us. *Communications of the ACM*, 55(9):54–60, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Garrison:2012:SFD

[960] Gary Garrison, Sanghyun Kim, and Robin L. Wakefield. Success factors for deploying cloud computing. *Communications of the ACM*, 55(9): 62–68, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Calinescu:2012:SAS

[961] Radu Calinescu, Carlo Ghezzi, Marta Kwiatkowska, and Raffaela Mirandola.

Self-adaptive software needs quantitative verification at runtime. *Communications of the ACM*, 55(9):69–77, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bowman:2012:QNU

[962] Doug A. Bowman, Ryan P. McMahan, and Eric D. Ragan. Questioning naturalism in 3D user interfaces. *Communications of the ACM*, 55 (9):78–88, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Buxton:2012:IIC

[963] William A. Buxton. Innovative interaction: from concept to the wild: technical perspective. *Communications of the ACM*, 55(9):90, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Zhai:2012:WGK

[964] Shumin Zhai and Per Ola Kristensson. The word-gesture keyboard: reimagining keyboard interaction. *Communications of the ACM*, 55(9):91–101, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Suciu:2012:SED

[965] Dan Suciu. SQL on an encrypted database: technical perspective. *Communications of the ACM*, 55(9):102, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Popa:2012:CPQ

[966] Raluca Ada Popa, Catherine M. S. Redfield, Nickolai Zeldovich, and Hari Balakrishnan. CryptDB: processing queries on an encrypted database. *Communications of the ACM*, 55(9): 103–111, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2012:LBPf

[967] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 55(9):117, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2012:QWW

[968] Leah Hoffmann. Q&A: What women want. *Communications of the ACM*, 55 (9):120, 119, September 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2012:WSC

[969] Vinton G. Cerf. Where is the science in computer science? *Communications of the ACM*, 55(10):5, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2012:WHC

[970] CACM Staff. When harm to conference reputation is self-inflicted. *Communications of the ACM*, 55(10):6–7, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Reed:2012:OPR

[971] Daniel Reed and Ed H. Chi. Online privacy; replicating research re-

sults. *Communications of the ACM*, 55(10):8–9, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2012:DDF

[972] Neil Savage. Digging for drug facts. *Communications of the ACM*, 55 (10):11–13, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mone:2012:RDC

[973] Gregory Mone. Redesigning the data center. *Communications of the ACM*, 55(10):14–16, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2012:CST

[974] Leah Hoffmann. Computer science and the three Rs. *Communications of the ACM*, 55(10):17–19, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2012:RFI

[975] Michael A. Cusumano. Reflecting on the Facebook IPO. *Communications of the ACM*, 55(10):20–23, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2012:GE

[976] Phillip G. Armour. The Goldilocks estimate. *Communications of the ACM*, 55(10):24–25, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neumann:2012:FSR

[977] Peter G. Neumann. The foresight saga, redux. *Communications of the ACM*, 55(10):26–29, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2012:NPC

[978] George V. Neville-Neil. A nice piece of code. *Communications of the ACM*, 55(10):30–31, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Blanchette:2012:CII

[979] Jean-François Blanchette. Computing as if infrastructure mattered. *Communications of the ACM*, 55(10):32–34, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sutherland:2012:TC

[980] Ivan Sutherland. The tyranny of the clock. *Communications of the ACM*, 55(10):35–36, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ratzel:2012:THP

[981] Rick Ratzel and Rodney Greenstreet. Toward higher precision. *Communications of the ACM*, 55(10):38–47, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Allspaw:2012:FIP

[982] John Allspaw. Fault injection in production. *Communications of the ACM*, 55(10):48–52, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kamp:2012:GLB

[983] Poul-Henning Kamp. A generation lost in the bazaar. *Communications of the ACM*, 55(10):53–55, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kearns:2012:ESC

[984] Michael Kearns. Experiments in social computation. *Communications of the ACM*, 55(10):56–67, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Simons:2012:IVU

[985] Barbara Simons and Douglas W. Jones. Internet voting in the U.S. *Communications of the ACM*, 55(10):68–77, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Domingos:2012:FUT

[986] Pedro Domingos. A few useful things to know about machine learning. *Communications of the ACM*, 55(10):78–87, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Servedio:2012:HDS

[987] Rocco A. Servedio. A high-dimensional surprise: technical perspective. *Communications of the ACM*, 55(10):89, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kindler:2012:SCO

[988] Guy Kindler, Anup Rao, Ryan O'Donnell, and Avi Wigderson. Spherical cubes: optimal foams from computational hardness amplification. *Communications of the ACM*, 55(10):90–97, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hendrickson:2012:GEL

[989] Bruce Hendrickson. Graph embeddings and linear equations: technical perspective. *Communications of the ACM*, 55(10):98, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Koutis:2012:FSC

[990] Ioannis Koutis, Gary L. Miller, and Richard Peng. A fast solver for a class of linear systems. *Communications of the ACM*, 55(10):99–107, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Landis:2012:LBF

[991] Geoffrey A. Landis. Last byte: Future tense: Fermi's Paradox and the end of the Universe. *Communications of the ACM*, 55(10):112, October 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2012:WMD

[992] Moshe Y. Vardi. Will MOOCs destroy academia? *Communications of the ACM*, 55(11):5, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2012:WAH

[993] Vinton G. Cerf. Why is accessibility so hard? *Communications of the ACM*, 55(11):7, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2012:WPS

[994] CACM Staff. When predicting, start with humility. *Communications of the ACM*, 55(11):8–9, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stonebraker:2012:NON

[995] Michael Stonebraker. New opportunities for New SQL. *Communications of the ACM*, 55(11):10–11, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rous:2012:MUA

[996] Bernard Rous. Major update to ACM's Computing Classification System. *Communications of the ACM*, 55(11):12, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2012:SM

[997] Gregory Goth. Software on Mars. *Communications of the ACM*, 55(11): 13–15, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2012:CC

[998] Tom Geller. Control without controllers. *Communications of the ACM*, 55(11):16–18, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2012:DT

[999] Samuel Greengard. On the digital trail. *Communications of the ACM*, 55 (11):19–21, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Basin:2012:RVP

[1000] David Basin and Srdjan Capkun. The research value of publishing attacks. *Communications of the ACM*, 55(11): 22–24, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2012:LSO

[1001] Pamela Samuelson. Legally speaking: Oracle v. Google: are APIs copyrightable? *Communications of the ACM*, 55(11):25–27, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McElheran:2012:DVC

[1002] Kristina McElheran. Decentralization versus centralization in IT governance. *Communications of the ACM*, 55(11):28–30, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Yadav:2012:LTC

[1003] Aman Yadav and John T. Korb. Learning to teach computer science: the need for a methods course. *Communications of the ACM*, 55(11):31–33, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kostyk:2012:SIE

[1004] Timothy Kostyk and Joseph Herkert. Societal implications of the emerging smart grid. *Communications of the ACM*, 55(11):34–36, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

DeMillo:2012:KTP

[1005] Richard A. DeMillo. Keeping technology promises. *Communications of the ACM*, 55(11):37–39, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anonymous:2012:REL

[1006] Anonymous. Resilience engineering: learning to embrace failure. *Communications of the ACM*, 55(11):40–47, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Krishnan:2012:WU

[1007] Kripa Krishnan. Weathering the unexpected. *Communications of the ACM*, 55(11):48–52, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McKusick:2012:DPF

[1008] Marshall Kirk McKusick. Disks from the perspective of a file system. *Communications of the ACM*, 55(11):53–55, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Boneh:2012:FEN

[1009] Dan Boneh, Amit Sahai, and Brent Waters. Functional encryption: a new vision for public-key cryptography. *Communications of the ACM*, 55 (11):56–64, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wegner:2012:C

[1010] Joerg Kurt Wegner, Aaron Sterling, Rajarshi Guha, Andreas Bender, Jean-Loup Faulon, Janna Hastings, Noel O'Boyle, John Overington, Herman Van Vlijmen, and Egon Willighagen. Cheminformatics. *Communications of the ACM*, 55(11):65–75, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Pfeifer:2012:CAB

[1011] Rolf Pfeifer, Max Lungarella, and Fumiya Iida. The challenges ahead for bio-inspired 'soft' robotics. *Communications of the ACM*, 55(11):76–87, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Szeliski:2012:OPC

[1012] Richard Szeliski. Open platforms for computational photography: technical perspective. *Communications of the ACM*, 55(11):89, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Adams:2012:FEP

[1013] Andrew Adams, David E. Jacobs, Jennifer Dolson, Marius Tico, Kari Pulli, Eino-Ville Talvala, Boris Ajdin, Daniel Vaquero, Hendrik P. A. Lensch, Mark Horowitz, Sung Hee Park, Natasha Gelfand, Jongmin Baek, Wojciech Matusik, and Marc Levoy. The Frankencamera: an experimental platform for computational photography. *Communications of the ACM*, 55(11):90–98, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Schulzinne:2012:RHB

[1014] Henning Schulzinne. The realities of home broadband: technical perspective. *Communications of the ACM*, 55(11):99, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sundaresan:2012:MHB

[1015] Srikanth Sundaresan, Walter de Donato, Nick Feamster, Renata Teixeira, Sam Crawford, and Antonio Pescapè. Measuring home broadband performance. *Communications of the ACM*, 55(11):100–109, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2012:LBPg

[1016] Peter Winkler. Last byte: Puzzled: Weighed in the balance. *Communications of the ACM*, 55(11):120, November 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hall:2012:UAP

[1017] Mary Hall. Understanding ACM's past. *Communications of the ACM*, 55(12):5, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2012:CSR

[1018] Vinton G. Cerf. Computer science revisited. *Communications of the ACM*, 55(12):7, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2012:WOA

[1019] CACM Staff. Why open access? *Communications of the ACM*, 55(12):8–9, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2012:LAP

[1020] Mark Guzdial and Judy Robertson. Levels of abstraction: pre-teens and career choices. *Communications of the ACM*, 55(12):12–13, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goth:2012:QQ

[1021] Gregory Goth. Quantum quests. *Communications of the ACM*, 55(12):15–17, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2012:ZZ

[1022] Gary Anthes. Zoom in, zoom out. *Communications of the ACM*, 55(12): 18–19, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2012:YDE

[1023] Paul Hyman. In the year of disruptive education. *Communications of the ACM*, 55(12):20–22, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Heeks:2012:IIB

[1024] Richard Heeks. IT innovation for the bottom of the pyramid. *Communications of the ACM*, 55(12):24–27, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anderson:2012:SPG

[1025] David Anderson. Saving Private Gromit. *Communications of the ACM*, 55(12):28–30, December 2012. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2012:CMC

[1026] George V. Neville-Neil. Can more code mean fewer bugs? *Communications of the ACM*, 55(12):31–32, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2012:M

[1027] Peter J. Denning. Moods. *Communications of the ACM*, 55(12):33–35, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dahlberg:2012:WWN

[1028] Teresa A. Dahlberg. Why we need an ACM Special Interest Group for broadening participation. *Communications of the ACM*, 55(12):36–38, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Newman:2012:ATR

[1029] William Newman. Alan Turing remembered. *Communications of the ACM*, 55(12):39–40, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jacobson:2012:ESE

[1030] Ivar Jacobson, Pan-Wei Ng, Paul E. McMahon, Ian Spence, and Svante Lidman. The essence of software engineering: the SEMAT kernel. *Communications of the ACM*, 55(12):42–49, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Erbad:2012:SSB

[1031] Aiman Erbad and Charles 'Buck' Krasic. Sender-side buffers and the case for multimedia adaptation. *Communications of the ACM*, 55(12):50–58, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cornwell:2012:ASS

[1032] Michael Cornwell. Anatomy of a solid-state drive. *Communications of the ACM*, 55(12):59–63, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Thomas:2012:SW

[1033] Bryce Thomas, Raja Jurdak, and Ian Atkinson. SPDYing up the web. *Communications of the ACM*, 55(12): 64–73, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

French:2012:MBT

[1034] Robert M. French. Moving beyond the Turing test. *Communications of the ACM*, 55(12):74–77, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Doty:2012:TAS

[1035] David Doty. Theory of algorithmic self-assembly. *Communications of the ACM*, 55(12):78–88, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Smaragdakis:2012:HLD

[1036] Yannis Smaragdakis. High-level data structures: technical perspective. *Communications of the ACM*, 55(12):90, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hawkins:2012:IDR

[1037] Peter Hawkins, Martin Rinard, Alex Aiken, Mooly Sagiv, and Kathleen Fisher. An introduction to data representation synthesis. *Communications of the ACM*, 55(12):91–99, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jadbabaie:2012:NAN

[1038] Ali Jadbabaie. Natural algorithms in a networked world: technical perspective. *Communications of the ACM*, 55(12):100, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chazelle:2012:NAI

[1039] Bernard Chazelle. Natural algorithms and influence systems. *Communications of the ACM*, 55(12):101–110, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2012:LBPh

[1040] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 55(12):126, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2012:QGI

[1041] Leah Hoffmann. Q&A: As good as it gets. *Communications of the ACM*, 55 (12):128, 127, December 2012. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2013:WBC

[1042] Moshe Y. Vardi. Who begat computing? *Communications of the ACM*, 56(1):5, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:PWR

[1043] Vinton G. Cerf. From the President: What's a robot? *Communications of the ACM*, 56(1):7, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:LEC

[1044] CACM Staff. Letters to the Editor: Computer science is not a science. *Communications of the ACM*, 56(1):8–9, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chesnais:2013:AAR

[1045] Alain Chesnais. ACM's annual report. *Communications of the ACM*, 56(1):11–15, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Reed:2013:BLT

[1046] Daniel Reed. BLOG@CACM: Lost in translation. *Communications of the ACM*, 56(1):16–17, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2013:NSL

[1047] Neil Savage. News: Stopping the leaks. *Communications of the ACM*, 56(1):19–21, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mone:2013:NBH

[1048] Gregory Mone. News: Beyond Hadoop. *Communications of the ACM*, 56(1):22–24, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Krakovsky:2013:NJF

[1049] Marina Krakovsky. News: Just the facts. *Communications of the ACM*, 56(1):25–27, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2013:TSM

[1050] Michael A. Cusumano. Technology strategy and management: The Apple–Samsung lawsuits. *Communications of the ACM*, 56(1):28–31, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2013:BSH

[1051] Phillip G. Armour. The business of software: How we build things: ... and why things are 90% complete. *Communications of the ACM*, 56(1):32–33, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Desai:2013:LTB

[1052] Deven Desai. Law and technology: Beyond location: data security in the 21st century. *Communications of the ACM*, 56(1):34–36, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Haigh:2013:HRF

[1053] Thomas Haigh. Historical reflections: Five lessons from really good history. *Communications of the ACM*, 56(1):37–40, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Khan:2013:VWC

[1054] Salman Khan. Viewpoint: What college could be like. *Communications of the ACM*, 56(1):41–43, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Grudin:2013:VCJ

[1055] Jonathan Grudin, Gloria Mark, and John Riedl. Viewpoint: Conference-journal hybrids. *Communications of the ACM*, 56(1):44–49, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Helland:2013:CC

[1056] Pat Helland. Condos and clouds. *Communications of the ACM*, 56(1):50–59, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:BSA

[1057] CACM Staff. Browser security: appearances can be deceiving. *Communications of the ACM*, 56(1):60–67, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Grossman:2013:WWS

[1058] Jeremiah Grossman. The Web won't be safe or secure until we break it. *Communications of the ACM*, 56 (1):68–72, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Becker:2013:HMC

[1059] Richard Becker, Ramón Cáceres, Karrie Hanson, Sibren Isaacman, Ji Meng Loh, Margaret Martonosi, James Rowland, Simon Urbanek, Alexander Varshavsky, and Chris Volinsky. Human mobility characterization from cellular network data. *Communications of the ACM*, 56(1):74–82, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bafna:2013:AG

[1060] Vineet Bafna, Alin Deutsch, Andrew Heiberg, Christos Kozanitis, Lucila Ohno-Machado, and George Varghese. Abstractions for genomics. *Communications of the ACM*, 56(1):83–93, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2013:CSM

[1061] Tamara Denning, Tadayoshi Kohno, and Henry M. Levy. Computer security and the modern home. *Communications of the ACM*, 56(1):94–103, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

DeCarlo:2013:VUD

[1062] Doug DeCarlo and Matthew Stone. Visualization, understanding, and design: technical perspective. *Communications of the ACM*, 56(1):105, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mitra:2013:IHM

[1063] Niloy J. Mitra, Yong-Liang Yang, Dong-Ming Yan, Wilmot Li, and Maneesh Agrawala. Illustrating how mechanical assemblies work. *Communications of the ACM*, 56(1):106–114, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rehg:2013:FPD

[1064] James M. Rehg. Finding people in depth: technical perspective. *Communications of the ACM*, 56(1):115, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shotton:2013:RTH

[1065] Jamie Shotton, Toby Sharp, Alex Kipman, Andrew Fitzgibbon, Mark Finocchio, Andrew Blake, Mat Cook, and Richard Moore. Real-time human pose recognition in parts from single depth images. *Communications of the ACM*, 56(1):116–124, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rucker:2013:LBF

[1066] Rudy Rucker. Last byte: Future tense: Share my enlightenment. *Communications of the ACM*, 56(1):136, 135, January 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Boisvert:2013:PAO

[1067] Ronald F. Boisvert and Jack W. Davidson. Positioning ACM for an open access future. *Communications of the ACM*, 56(2):5, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:GAF

[1068] Vinton G. Cerf. Growing the ACM family. *Communications of the ACM*, 56(2):7, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Meyer:2013:WRD

[1069] Bertrand Meyer. When reviews do more than sting. *Communications of the ACM*, 56(2):8–9, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2013:LS

[1070] Neil Savage. Life in simulation. *Communications of the ACM*, 56(2):11–13, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2013:RR

[1071] Alex Wright. Revving the rover. *Communications of the ACM*, 56(2):14–16, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2013:NMH

[1072] Samuel Greengard. A new model for healthcare. *Communications of the ACM*, 56(2):17–19, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Moglen:2013:TWW

[1073] Eben Moglen. The tangled web we have woven. *Communications of the ACM*, 56(2):20–22, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neumann:2013:IRM

[1074] Peter G. Neumann. Inside risks: More sight on foresight. *Communications of the ACM*, 56(2):23–25, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2013:KVD

[1075] George V. Neville-Neil. Kode vicious: Divided by division. *Communications of the ACM*, 56(2):26–27, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cooper:2013:ERS

[1076] Steve Cooper and Mehran Sahami. Education: Reflections on Stanford's MOOCs. *Communications of the ACM*, 56(2):28–30, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Aizcorbe:2013:VMD

[1077] Ana Aizcorbe, Samuel Kortum, and Unni Pillai. The value of microprocessor designs. *Communications of the ACM*, 56(2):31–32, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sunyaev:2013:CSC

[1078] Ali Sunyaev and Stephan Schneider. Cloud services certification. *Communications of the ACM*, 56(2):33–36, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jones:2013:EGP

[1079] Anita Jones. The explosive growth of postdocs in computer science. *Communications of the ACM*, 56(2):37–39, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cheswick:2013:RP

[1080] William Cheswick. Rethinking passwords. *Communications of the ACM*, 56(2):40–44, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gregg:2013:TMA

[1081] Brendan Gregg. Thinking methodically about performance. *Communications of the ACM*, 56(2):45–51, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Watson:2013:DAC

[1082] Robert N. M. Watson. A decade of OS access-control extensibility. *Communications of the ACM*, 56(2):52–63, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Juels:2013:NAS

[1083] Ari Juels and Alina Oprea. New approaches to security and availability for cloud data. *Communications of the ACM*, 56(2):64–73, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dean:2013:TS

[1084] Jeffrey Dean and Luiz André Barroso. The tail at scale. *Communications of the ACM*, 56(2):74–80, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cadar:2013:SES

[1085] Cristian Cadar and Koushik Sen. Symbolic execution for software testing: three decades later. *Communications of the ACM*, 56(2):82–90, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bose:2013:DSR

[1086] Pradip Bose. Is dark silicon real?: technical perspective. *Communications of the ACM*, 56(2):92, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Esmaeilzadeh:2013:PCM

[1087] Hadi Esmaeilzadeh, Emily Blem, Renée St. Amant, Karthikeyan Sankaralingam, and Doug Burger. Power challenges may end the multicore era. *Communications of the ACM*, 56(2):93–102, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2013:LBPa

[1088] Peter Winkler. Last byte: Puzzled: Tumbling dice. *Communications of the ACM*, 56(2):112, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2013:BB

[1089] Moshe Y. Vardi. To boycott or not to boycott. *Communications of the ACM*, 56(3):5, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:RI

[1090] Vinton G. Cerf. A revolution in India. *Communications of the ACM*, 56(3):7, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:NPO

[1091] CACM Staff. No place for old educational flaws in new online media. *Communications of the ACM*, 56(3):8–9, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hong:2013:PGP

[1092] Jason Hong and Daniel Reed. Passwords getting painful, computing still blissful. *Communications of the ACM*, 56(3):10–11, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2013:DD

[1093] Neil Savage. Decoding dementia. *Communications of the ACM*, 56(3):13–15, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mone:2013:RS

[1094] Gregory Mone. Rise of the swarm. *Communications of the ACM*, 56 (3):16–17, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2013:CSE

[1095] Paul Hyman. Cybercrime: it's serious, but exactly how serious? *Communications of the ACM*, 56(3):18–20, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:AFI

[1096] CACM Staff. ACM Fellows inducted. *Communications of the ACM*, 56(3):21, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2013:CCR

[1097] Pamela Samuelson. A copyright challenge to resales of digital music. *Communications of the ACM*, 56(3):24–26, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hood:2013:ACW

[1098] Denice Ward Hood, Stafford Hood, and Dominica McBride. Academic careers workshop for underrepresented groups. *Communications of the ACM*, 56(3):27–29, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2013:MWP

[1099] Peter J. Denning. Moods, wicked problems, and learning. *Communications of the ACM*, 56(3):30–32, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hollander:2013:EVE

[1100] Rachelle Hollander. Ethics viewpoints efficacies. *Communications of the ACM*, 56(3):33–34, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Johnson:2013:CCP

[1101] Jeff Johnson. Can computer professionals and digital technology engineers help reduce gun violence? *Communications of the ACM*, 56(3):35–37, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Thorup:2013:FSR

[1102] Mikkel Thorup. Funding successful research. *Communications of the ACM*, 56(3):38–39, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kumar:2013:HMI

[1103] Arun Kumar, Feng Niu, and Christopher Ré. Hazy: making it easier to build and maintain big-data analytics. *Communications of the ACM*, 56(3):40–49, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Beckman:2013:STD

[1104] Brian Beckman and Erik Meijer. The story of the teapot in DHTML. *Communications of the ACM*, 56(3):50–55, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Matsudaira:2013:MMW

[1105] Kate Matsudaira. Making the mobile web faster. *Communications of the ACM*, 56(3):56–61, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Olson:2013:EMA

[1106] Edwin Olson, Johannes Strom, Rob Goeddel, Ryan Morton, Pradeep Ranganathan, and Andrew Richardson. Exploration and mapping with autonomous robot teams. *Communications of the ACM*, 56(3):62–70, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jabeur:2013:MSN

[1107] Nafaâ Jabeur, Sherali Zeadally, and Biju Sayed. Mobile social networking applications. *Communications of the ACM*, 56(3):71–79, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fomin:2013:EEA

[1108] Fedor V. Fomin and Petteri Kaski. Exact exponential algorithms. *Communications of the ACM*, 56(3):80–88, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Oran:2013:VQA

[1109] David Oran. Video quality assessment in the age of Internet video: technical perspective. *Communications of the ACM*, 56(3):90, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dobrian:2013:UIV

[1110] Florin Dobrian, Asad Awan, Dilip Joseph, Aditya Ganjam, Jibin Zhan, Vyas Sekar, Ion Stoica, and Hui Zhang. Understanding the impact of video quality on user engagement. *Communications of the ACM*, 56(3):91–99, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2013:LBPb

[1111] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 56(3):102, March 2013.

CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2013:LBQa

[1112] Leah Hoffmann. Last byte: Q&A: The power of distribution. *Communications of the ACM*, 56(3):104–ff, March 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bourne:2013:DTR

[1113] Stephen Bourne and George Neville-Neil. Developing tools and resources for those in practice. *Communications of the ACM*, 56(4):5, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:OA

[1114] Vinton G. Cerf. Open access. *Communications of the ACM*, 56(4):7, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Delman:2013:OAP

[1115] Scott E. Delman. An open access partnership. *Communications of the ACM*, 56(4):9, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:RR

[1116] CACM Staff. A robot's roots. *Communications of the ACM*, 56(4):10–11, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2013:SFC

[1117] Mark Guzdial and Daniel Reed. Securing the future of computer science; reconsidering analog computing. *Communications of the ACM*, 56(4):12–13, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Subbaraman:2013:AC

[1118] Nidhi Subbaraman. Artificial connections. *Communications of the ACM*, 56(4):15–17, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2013:IDB

[1119] Gary Anthes. Inexact design: beyond fault-tolerance. *Communications of the ACM*, 56(4):18–20, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2013:LBB

[1120] Leah Hoffmann. Looking back at big data. *Communications of the ACM*, 56(4):21–23, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2013:CFT

[1121] Michael A. Cusumano. Are the costs of 'free' too high in online education? *Communications of the ACM*, 56(4):26–28, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Best:2013:PNW

[1122] Michael L. Best. Peacebuilding in a networked world. *Communications of the ACM*, 56(4):30–32, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2013:CA

[1123] George V. Neville-Neil. Code abuse. *Communications of the ACM*, 56(4):

33–34, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kshetri:2013:CVC

[1124] Nir Kshetri. Cyber-victimization and cybersecurity in China. *Communications of the ACM*, 56(4):35–37, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosenberger:2013:PHF

[1125] Robert Rosenberger. The problem with hands-free dashboard cellphones. *Communications of the ACM*, 56(4):38–40, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Zakas:2013:EWD

[1126] Nicholas C. Zakas. The evolution of web development for mobile devices. *Communications of the ACM*, 56(4):42–48, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Meenan:2013:HFY

[1127] Patrick Meenan. How fast is your website? *Communications of the ACM*, 56(4):49–55, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bacon:2013:FPM

[1128] David F. Bacon, Rodric Rabbah, and Sunil Shukla. FPGA programming for the masses. *Communications of the ACM*, 56(4):56–63, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Xu:2013:WCT

[1129] Zhengchuan Xu, Qing Hu, and Chenghong Zhang. Why computer talents become computer hackers. *Communications of the ACM*, 56(4):64–74, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Thorat:2013:OMV

[1130] Nishant Thorat, Arvind Raghavendran, and Nigel Groves. Offline management in virtualized environments. *Communications of the ACM*, 56(4): 75–81, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Feldman:2013:TAS

[1131] Ronen Feldman. Techniques and applications for sentiment analysis. *Communications of the ACM*, 56(4):82–89, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Forsyth:2013:UPR

[1132] David Forsyth. Understanding pictures of rooms: technical perspective. *Communications of the ACM*, 56(4):91, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wang:2013:DLL

[1133] Huayan Wang, Stephen Gould, and Daphne Roller. Discriminative learning with latent variables for cluttered indoor scene understanding. *Communications of the ACM*, 56(4):92–99, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

DiFilippo:2013:FT

[1134] Paul Di Filippo. Future tense. *Communications of the ACM*, 56(4):104–ff, April 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2013:FC

[1135] Moshe Y. Vardi. Fricative computing. *Communications of the ACM*, 56(5):5, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:APS

[1136] Vinton G. Cerf. ACM President's salary increased by 300%! *Communications of the ACM*, 56(5):7, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Delman:2013:FGR

[1137] Scott E. Delman. A few good reasons to publish in Communications. *Communications of the ACM*, 56(5):9, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:TOB

[1138] CACM Staff. Try old boys security network. *Communications of the ACM*, 56(5):12–13, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wing:2013:EIU

[1139] Jeannette M. Wing and Mark Guzdial. Encouraging IT usage in future healthcare, quality in CS education. *Communications of the ACM*, 56(5):14–15, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2013:PG

[1140] Alex Wright. Proving grounds. *Communications of the ACM*, 56(5):17–19, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2013:VE

[1141] Samuel Greengard. Vanishing electronics. *Communications of the ACM*, 56(5):20–22, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2013:SDE

[1142] Paul Hyman. 'small data' enabled prediction of Obama's win, say economists. *Communications of the ACM*, 56(5):23–25, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hugenholtz:2013:FUE

[1143] P. Bernt Hugenholtz. Fair use in Europe. *Communications of the ACM*, 56(5):26–28, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anderson:2013:MNF

[1144] David Anderson. Max Newman: forgotten man of early British computing. *Communications of the ACM*, 56(5):29–31, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2013:HCC

[1145] Mark Guzdial. Human-centered computing: a new degree for Licklider's world. *Communications of the ACM*, 56(5):32–34, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2013:SCS

[1146] Peter J. Denning. The science in computer science. *Communications of the ACM*, 56(5):35–38, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Flynn:2013:MPP

[1147] Michael J. Flynn, Oskar Mencer, Veljko Milutinovic, Goran Rakocevic, Per Stenstrom, Roman Trobec, and Mateo Valero. Moving from petaflops to petadata. *Communications of the ACM*, 56(5):39–42, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sweeney:2013:DOA

[1148] Latanya Sweeney. Discrimination in online ad delivery. *Communications of the ACM*, 56(5):44–54, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bailis:2013:ECT

[1149] Peter Bailis and Ali Ghodsi. Eventual consistency today: limitations, extensions, and beyond. *Communications of the ACM*, 56(5):55–63, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Leventhal:2013:FSA

[1150] Adam H. Leventhal. A file system all its own. *Communications of the ACM*, 56(5):64–67, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jacob:2013:CRS

[1151] Mithun George Jacob, Yu-Ting Li, George A. Akingba, and Juan P. Wachs. Collaboration with a robotic scrub nurse. *Communications of the ACM*, 56(5):68–75, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kemerer:2013:STW

[1152] Chris F. Kemerer, Charles Zhechao Liu, and Michael D. Smith. Strategies for tomorrow's 'winners-take-some' digital goods markets. *Communications of the ACM*, 56(5):76–82, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Junglas:2013:PCT

[1153] Iris Junglas and Jeanne Harris. The promise of consumer technologies in emerging markets. *Communications of the ACM*, 56(5):84–90, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Pharr:2013:RTE

[1154] Matt Pharr. The ray-tracing engine that could: technical perspective. *Communications of the ACM*, 56(5):92, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Parker:2013:GRT

[1155] Steven G. Parker, Heiko Friedrich, David Luebke, Keith Morley, James Bigler, Jared Hoberock, David McAllister, Austin Robison, Andreas Dietrich, Greg Humphreys, Morgan McGuire, and Martin Stich. GPU ray tracing. *Communications of the ACM*, 56(5):93–101, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2013:LBPc

[1156] Peter Winkler. Last byte: Puzzled: Ant Alice's adventures. *Communications of the ACM*, 56(5):104, May 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Altman:2013:SFG

[1157] Erik R. Altman. SGB fortifies global SIG community. *Communications of the ACM*, 56(6):5, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:PHO

[1158] Vinton G. Cerf. From the President: Honoring our best. *Communications of the ACM*, 56(6):7, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:LEH

[1159] CACM Staff. Letters to the Editor: How to claim your fair share in academic publishing. *Communications of the ACM*, 56(6):8–9, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hong:2013:CSN

[1160] Jason Hong and Judy Robertson. Computer security needs refocus, and be nice about it. *Communications of the ACM*, 56(6):10–11, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2013:DLC

[1161] Gary Anthes. Deep learning comes of age. *Communications of the ACM*, 56(6):13–15, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mone:2013:FFD

[1162] Gregory Mone. The future is flexible displays. *Communications of the ACM*, 56(6):16–17, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2013:ARG

[1163] Paul Hyman. Augmented-reality glasses bring cloud security into sharp focus. *Communications of the ACM*, 56(6):18–20, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2013:PP

[1164] Neil Savage. Proofs probable. *Communications of the ACM*, 56(6):22–24, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:AHC

[1165] CACM Staff. ACM honors computing innovators. *Communications of the ACM*, 56(6):25, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Filshtinskiy:2013:PSC

[1166] Stas Filshtinskiy. Privacy and security: Cybercrime, cyberweapons, cyber wars: is there too much of it in the air? *Communications of the ACM*, 56(6):28–30, June 2013. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2013:BSW

[1167] Phillip G. Armour. The business of software: What is a “good” estimate?: whether forecasting is valuable. *Communications of the ACM*, 56(6):31–32, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2013:KVS

[1168] George V. Neville-Neil. Kode vicious: Swamped by automation. *Communications of the ACM*, 56(6):33–34, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2013:PIT

[1169] Peter J. Denning. The profession of IT: Thumb numbers. *Communications of the ACM*, 56(6):35–37, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Leveson:2013:IRL

[1170] Nancy G. Leveson. Inside risks: Learning from the past to face the risks of today. *Communications of the ACM*, 56(6):38–42, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wicker:2013:VAI

[1171] Stephen B. Wicker and Stephanie M. Santoso. Viewpoint: Access to the Internet is a human right. *Communications of the ACM*, 56(6):43–46, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geer:2013:RIN

[1172] Dan Geer. Resolved: the Internet is no place for critical infrastructure. *Communications of the ACM*, 56(6):48–53, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hsu:2013:RTG

[1173] Bill Hsu and Marc Sosnick-Pérez. Realtime GPU audio. *Communications of the ACM*, 56(6):54–62, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cavage:2013:TNG

[1174] Mark Cavage. There is no getting around it: you are building a distributed system. *Communications of the ACM*, 56(6):63–70, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Scekic:2013:IRS

[1175] Ognjen Scekic, Hong-Linh Truong, and Schahram Dustdar. Incentives and rewarding in social computing. *Communications of the ACM*, 56(6):72–82, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Adam:2013:CAC

[1176] Nabil Adam, Randy Stiles, Andrew Zimdars, Ryan Timmons, Jackie Leung, Greg Stachnick, Jeff Merrick, Robert Coop, Vadim Slavin, Tanya Kruglikov, John Galmiche, and Sharad Mehrotra. Consequence analysis of complex events on critical U.S. infrastructure. *Communications of the ACM*, 56(6):83–91, June 2013. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Agarwal:2013:CRW

[1177] Deepak Agarwal, Bee-Chung Chen, Pradheep Elango, and Raghu Ramakrishnan. Content recommendation on Web portals. *Communications of the ACM*, 56(6):92–101, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chang:2013:CPC

[1178] Yao-Wen Chang. Circuit placement challenges: technical perspective. *Communications of the ACM*, 56(6): 104, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kim:2013:SAP

[1179] Myung-Chul Kim, Dong-Jin Lee, and Igor L. Markov. SimPL: an algorithm for placing VLSI circuits. *Communications of the ACM*, 56(6):105–113, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2013:LBPd

[1180] Peter Winkler. Last byte: Puzzled answers. *Communications of the ACM*, 56(6):117, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2013:QCC

[1181] Leah Hoffmann. Q&A: Cracking the code. *Communications of the ACM*, 56(6):120–ff, June 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2013:GRD

[1182] Moshe Y. Vardi. The great robotics debate. *Communications of the ACM*, 56 (7):5, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:POW

[1183] Vinton G. Cerf. From the President: 'But officer, I was only programming at 100 lines per hour!'. *Communications of the ACM*, 56(7):7, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:LEP

[1184] CACM Staff. Letters to the Editor: Plenty more hacker motivations. *Communications of the ACM*, 56(7):8–9, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hong:2013:PDS

[1185] Jason Hong. Ph.D. students must break away from undergraduate mentality. *Communications of the ACM*, 56(7):10–11, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shein:2013:KCC

[1186] Esther Shein. Keeping computers cool from the inside. *Communications of the ACM*, 56(7):13–16, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2013:AIF

[1187] Samuel Greengard. All the items fit to print. *Communications of the ACM*, 56(7):17–19, July 2013. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2013:BC

[1188] Neil Savage. Backing creativity. *Communications of the ACM*, 56(7):20–21, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2013:LSSa

[1189] Pamela Samuelson. Legally speaking: Statutory damages as a threat to innovation. *Communications of the ACM*, 56(7):24–26, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tang:2013:CEI

[1190] Christopher S. Tang and Joshua Zimmerman. Computing ethics: Information and communication technology for managing supply chain risks. *Communications of the ACM*, 56(7):27–29, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sako:2013:TSM

[1191] Mari Sako. Technology strategy and management: The business of professionals. *Communications of the ACM*, 56(7):30–32, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Eglash:2013:BPT

[1192] Ron Eglash, Juan E. Gilbert, and Ellen Foster. Broadening participation: Toward culturally responsive computing education. *Communications of the ACM*, 56(7):33–36, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ford:2013:VCA

[1193] Martin Ford. Viewpoint: Could artificial intelligence create an unemployment crisis? *Communications of the ACM*, 56(7):37–39, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McKenney:2013:SDS

[1194] Paul E. McKenney. Structured deferral: synchronization via procrastination. *Communications of the ACM*, 56(7):40–49, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

AlBahra:2013:NAS

[1195] Samy Al Bahra. Nonblocking algorithms and scalable multicore programming. *Communications of the ACM*, 56(7):50–61, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Desnoyers:2013:PCN

[1196] Mathieu Desnoyers. Proving the correctness of nonblocking data structures. *Communications of the ACM*, 56(7):62–69, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tang:2013:IDB

[1197] Yang Tang, Di Wang, Jing Bai, Xiaoyan Zhu, and Ming Li. Information distance between what I said and what it heard. *Communications of the ACM*, 56(7):70–77, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Procaccia:2013:CCJ

[1198] Ariel D. Procaccia. Cake cutting: not just child's play. *Communications of the ACM*, 56(7):78–87, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Marathe:2013:CE

[1199] Madhav Marathe and Anil Kumar S. Vullikanti. Computational epidemiology. *Communications of the ACM*, 56(7):88–96, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wonka:2013:FAV

[1200] Peter Wonka. A fresh approach to vector graphics: technical perspective. *Communications of the ACM*, 56(7): 100, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Orzan:2013:DCV

[1201] Alexandrina Orzan, Adrien Bousseau, Pascal Barla, Holger Winnemöller, Joëlle Thollot, and David Salesin. Diffusion curves: a vector representation for smooth-shaded images. *Communications of the ACM*, 56(7):101–108, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McClelland:2013:LBF

[1202] Mark McClelland. Last byte: Future tense. *Communications of the ACM*, 56(7):112–ff, July 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2013:WFP

[1203] Moshe Y. Vardi and Victor Vianu. What is a flagship publication? *Communications of the ACM*, 56(8):5, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:CSE

[1204] Vinton G. Cerf. Computer science education — revisited. *Communications of the ACM*, 56(8):7, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:CS

[1205] CACM Staff. Is computing science? *Communications of the ACM*, 56(8):9, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guo:2013:TPW

[1206] Philip Guo. Teaching programming the way it works outside the classroom. *Communications of the ACM*, 56(8):10–11, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2013:NAI

[1207] Samuel Greengard. A new approach to information storage. *Communications of the ACM*, 56(8):13–15, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2013:PHT

[1208] Alex Wright. Patient, heal thyself. *Communications of the ACM*, 56(8):16–18, August 2013. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2013:SAE

[1209] Paul Hyman. Software aims to ensure fairness in crowdsourcing projects. *Communications of the ACM*, 56 (8):19–21, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Heeks:2013:ULC

[1210] Richard Heeks and Andrew Robinson. Ultra-low-cost computing and developing countries. *Communications of the ACM*, 56(8):22–24, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dellarocas:2013:MMM

[1211] Chrysanthos Dellarocas and Marshall Van Alstyne. Money models for MOOCs. *Communications of the ACM*, 56(8):25–28, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Byres:2013:AGS

[1212] Eric Byres. The air gap: SCADA's enduring security myth. *Communications of the ACM*, 56(8):29–31, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2013:CPS

[1213] George V. Neville-Neil. Cherry-picking and the scientific method. *Communications of the ACM*, 56(8):32–33, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Porter:2013:SIP

[1214] Leo Porter, Mark Guzdial, Charlie McDowell, and Beth Simon. Success in introductory programming: what works? *Communications of the ACM*, 56(8):34–36, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Richet:2013:OCF

[1215] Jean-Loup Richet. Overt censorship: a fatal mistake? *Communications of the ACM*, 56(8):37–38, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tseitlin:2013:AO

[1216] Ariel Tseitlin. The antifragile organization. *Communications of the ACM*, 56(8):40–44, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Nicolaou:2013:BPM

[1217] Alex Nicolaou. Best practices on the move: building web apps for mobile devices. *Communications of the ACM*, 56(8):45–51, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Everts:2013:RMP

[1218] Tammy Everts. Rules for mobile performance optimization. *Communications of the ACM*, 56(8):52–59, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lauritsen:2013:WFC

[1219] Marc Lauritsen. Are we free to code the law? *Communications of the ACM*, 56(8):60–66, August 2013. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wainer:2013:HPI

[1220] Jacques Wainer, Michael Eckmann, Siome Goldenstein, and Anderson Rocha. How productivity and impact differ across computer science subareas. *Communications of the ACM*, 56(8):67–73, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bongard:2013:ER

[1221] Josh C. Bongard. Evolutionary robotics. *Communications of the ACM*, 56(8):74–83, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Naor:2013:EGE

[1222] Assaf Naor. Every graph is essentially sparse. *Communications of the ACM*, 56(8):86, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Batson:2013:SSG

[1223] Joshua Batson, Daniel A. Spielman, Nikhil Srivastava, and Shang-Hua Teng. Spectral sparsification of graphs: theory and algorithms. *Communications of the ACM*, 56(8):87–94, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2013:LBPe

[1224] Peter Winkler. Last byte: Puzzled: Wins in a row. *Communications of the ACM*, 56(8):96, August 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2013:ICR

[1225] Moshe Y. Vardi. Has the innovation cup run dry? *Communications of the ACM*, 56(9):5, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:FSC

[1226] Vinton G. Cerf. Freedom and the social contract. *Communications of the ACM*, 56(9):7, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:PSU

[1227] CACM Staff. For privacy and security, use public keys everywhere. *Communications of the ACM*, 56(9):8–9, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stonebraker:2013:BDB

[1228] Michael Stonebraker and Judy Robertson. Big data is 'buzzword du jour;' CS academics 'have the best job'. *Communications of the ACM*, 56(9): 10–11, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Edwards:2013:MDE

[1229] Chris Edwards. Magnetic diversion for electronic switches. *Communications of the ACM*, 56(9):13–15, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kirkpatrick:2013:SDN

[1230] Keith Kirkpatrick. Software-defined networking. *Communications of the ACM*, 56(9):16–19, September 2013.

CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shein:2013:ED

[1231] Esther Shein. Ephemeral data. *Communications of the ACM*, 56(9):20–22, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

DiDio:2013:RDE

[1232] Laura DiDio. Remembering Douglas Engelbart. *Communications of the ACM*, 56(9):24–25, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Grimmelmann:2013:WDA

[1233] James Grimmelmann. What to do about Google? *Communications of the ACM*, 56(9):28–30, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Haigh:2013:SSP

[1234] Thomas Haigh. Software and souls; programs and packages. *Communications of the ACM*, 56(9):31–34, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2013:OSL

[1235] Peter J. Denning. The other side of language. *Communications of the ACM*, 56(9):35–37, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Obrenovic:2013:RPC

[1236] Zeljko Obrenović. Research and practice: the curious case of 'small' researchers-practitioners. *Communications of the ACM*, 56(9):38–40, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Snyder:2013:IHP

[1237] Lawrence Snyder. An interview with Hadi Partovi. *Communications of the ACM*, 56(9):41–45, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Michael:2013:BAC

[1238] Maged M. Michael. The balancing act of choosing nonblocking features. *Communications of the ACM*, 56(9):46–53, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hull:2013:OS

[1239] Sean Hull. 20 obstacles to scalability. *Communications of the ACM*, 56 (9):54–59, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lameter:2013:ONU

[1240] Christoph Lameter. An overview of non-uniform memory access. *Communications of the ACM*, 56(9):59–54, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Benford:2013:UUE

[1241] Steve Benford, Chris Greenhalgh, Gabriella Giannachi, Brendan Walker, Joe Marshall, and Tom Rodden. Uncomfortable user experience. *Communications of the ACM*, 56(9):66–73, September 2013. CODEN CACMA2.

ISSN 0001-0782 (print), 1557-7317 (electronic).

Braverman:2013:CRN

[1242] Mark Braverman. Computing with real numbers, from Archimedes to Turing and beyond. *Communications of the ACM*, 56(9):74–83, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fisher:2013:VAS

[1243] Michael Fisher, Louise Dennis, and Matt Webster. Verifying autonomous systems. *Communications of the ACM*, 56(9):84–93, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Perona:2013:PVC

[1244] Pietro Perona. Progress in visual categorization: technical perspective. *Communications of the ACM*, 56(9):96, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Felzenszwalb:2013:VOD

[1245] Pedro Felzenszwalb, Ross Girshick, David McAllester, and Deva Ramanan. Visual object detection with deformable part models. *Communications of the ACM*, 56(9):97–105, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2013:LBPf

[1246] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 56(9):110, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2013:LBQb

[1247] Leah Hoffmann. Last byte: Q&A: Big challenge. *Communications of the ACM*, 56(9):112–ff, September 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

White:2013:FA

[1248] John White. On the future of ACM. *Communications of the ACM*, 56(10): 5, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:RTC

[1249] Vinton G. Cerf. Revisiting the tragedy of the commons. *Communications of the ACM*, 56(10):7, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:DAB

[1250] CACM Staff. Deep accountability, beyond even liability. *Communications of the ACM*, 56(10):8–9, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guo:2013:HSE

[1251] Philip Guo. Helping scientists, engineers to work up to 100 times faster. *Communications of the ACM*, 56(10):12–13, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2013:TG

[1252] Alex Wright. Tuning in to graphene. *Communications of the ACM*, 56 (10):15–17, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2013:MIS

[1253] Tom Geller. Making the Internet safe for gadgets. *Communications of the ACM*, 56(10):18–20, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2013:SHL

[1254] Paul Hyman. Software helps linguists reconstruct, decipher ancient languages. *Communications of the ACM*, 56(10):21–23, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Underwood:2013:ATY

[1255] Sarah Underwood. The Alan Turing Year leaves a rich legacy. *Communications of the ACM*, 56(10):24–25, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2013:ESV

[1256] Michael A. Cusumano. Evaluating a startup venture. *Communications of the ACM*, 56(10):26–29, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2013:WFS

[1257] Phillip G. Armour. When faster is slower. *Communications of the ACM*, 56(10):30–32, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2013:KVN

[1258] George V. Neville-Neil. Kode vicious: The naming of hosts is a difficult matter. *Communications of the ACM*, 56 (10):33–34, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fu:2013:CCR

[1259] Kevin Fu and James Blum. Controlling for cybersecurity risks of medical device software. *Communications of the ACM*, 56(10):35–37, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ackley:2013:BE

[1260] David H. Ackley. Beyond efficiency. *Communications of the ACM*, 56(10):38–40, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Loveless:2013:BG

[1261] Jacob Loveless. Barbarians at the gateways. *Communications of the ACM*, 56(10):42–49, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Loveless:2013:OAH

[1262] Jacob Loveless, Sasha Stoikov, and Rolf Waeber. Online algorithms in high-frequency trading. *Communications of the ACM*, 56(10):50–56, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Strowes:2013:PMT

[1263] Stephen D. Strowes. Passively measuring TCP round-trip times. *Communications of the ACM*, 56(10):57–64, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bex:2013:IAW

[1264] Floris Bex, John Lawrence, Mark Snaith, and Chris Reed. Implementing the argument web. *Communications of the ACM*, 56(10):66–73, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoonlor:2013:TCS

[1265] Apirak Hoonlor, Boleslaw K. Szymanski, and Mohammed J. Zaki. Trends in computer science research. *Communications of the ACM*, 56(10):74–83, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

VanMeter:2013:BBQ

[1266] Rodney Van Meter and Clare Horsman. A blueprint for building a quantum computer. *Communications of the ACM*, 56(10):84–93, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Alur:2013:CWV

[1267] Rajeev Alur. Can we verify cyber-physical systems?: technical perspective. *Communications of the ACM*, 56(10):96, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Althoff:2013:FVP

[1268] Matthias Althoff, Akshay Rajhans, Bruce H. Krogh, Soner Yaldiz, Xin Li, and Larry Pileggi. Formal verification of phase-locked loops using reachability analysis and continuization. *Communications of the ACM*, 56 (10):97–104, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Clegg:2013:LBF

[1269] Brian Clegg. Last byte: Future tense. *Communications of the ACM*, 56(10):112–ff, October 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2013:EAN

[1270] Moshe Y. Vardi. The end of the American network. *Communications of the ACM*, 56(11):5, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:HLF

[1271] Vinton G. Cerf. Heidelberg Laureate Forum. *Communications of the ACM*, 56(11):7, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:MAF

[1272] CACM Staff. Microprocessor architectures follow markets and silicon. *Communications of the ACM*, 56(11):8–9, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hong:2013:CPI

[1273] Jason Hong. Considering privacy issues in the context of Google Glass. *Communications of the ACM*, 56(11): 10–11, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mone:2013:FPE

[1274] Gregory Mone. Future-proof encryption. *Communications of the ACM*, 56 (11):12–14, November 2013. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2013:MTM

[1275] Neil Savage. More than a mouse. *Communications of the ACM*, 56(11): 15–16, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kirkpatrick:2013:LIR

[1276] Keith Kirkpatrick. Legal issues with robots. *Communications of the ACM*, 56(11):17–19, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mulligan:2013:PSW

[1277] Deirdre K. Mulligan and Kenneth A. Bamberger. Privacy and security: What regulators can do to advance privacy through design. *Communications of the ACM*, 56(11):20–22, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2013:LSSb

[1278] Pamela Samuelson. Legally speaking: Is software patentable? *Communications of the ACM*, 56(11):23–25, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Michael:2013:CEN

[1279] Katina Michael and M. G. Michael. Computing ethics: No limits to watching? *Communications of the ACM*, 56 (11):26–28, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

VanAlstyne:2013:EBD

[1280] Marshall Van Alstyne. Economic and business dimensions: Why not immortality? *Communications of the ACM*, 56(11):29–31, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wilson:2013:EMC

[1281] Cameron Wilson. Education: Making computer science count. *Communications of the ACM*, 56(11):32–33, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Langlotz:2013:VAR

[1282] Tobias Langlotz, Jens Grubert, and Raphael Grasset. Viewpoint: Augmented reality browsers: essential products or only gadgets? *Communications of the ACM*, 56(11):34–36, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roche:2013:ADP

[1283] James Roche. Adopting DevOps practices in quality assurance. *Communications of the ACM*, 56(11):38–43, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mitchell:2013:LS

[1284] Neil Mitchell. Leaking space. *Communications of the ACM*, 56(11):44–52, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jacobson:2013:ASP

[1285] Ivar Jacobson, Ian Spence, and Pan-Wei Ng. Agile and SEMAT: perfect partners. *Communications of the ACM*, 56(11):53–59, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Maiden:2013:CTR

[1286] Neil Maiden, Sonali D'Souza, Sara Jones, Lars Müller, Lucia Pannese, Kristine Pitts, Michael Prilla, Kevin Pudney, Malcolm Rose, Ian Turner, and Konstantinos Zachos. Computing technologies for reflective, creative care of people with dementia. *Communications of the ACM*, 56(11): 60–67, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kaganer:2013:MTM

[1287] Evgeny Kaganer, Gabriel A. Giordano, Sebastien Brion, and Marco Tortoriello. Media tablets for mobile learning. *Communications of the ACM*, 56 (11):68–75, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Treleaven:2013:ATR

[1288] Philip Treleaven, Michal Galas, and Vidhi Lalchand. Algorithmic trading review. *Communications of the ACM*, 56(11):76–85, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Diallo:2013:AAC

[1289] Mamadou Tourad Diallo, Hassnaa Moustafa, Hossam Afifi, and Nicolas Marechal. Adaptation of audiovisual contents and their delivery means. *Communications of the ACM*, 56(11):86–93, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Borkar:2013:CDM

[1290] Shekhar Borkar. Centip3De demonstrates more than Moore...: technical perspective. *Communications of the ACM*, 56(11):96, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dreslinski:2013:CMC

[1291] Ronald G. Dreslinski, David Fick, Bharan Giridhar, Gyouho Kim, Sangwon Seo, Matthew Fojtik, Sudhir Satpathy, Yoonmyung Lee, Daeyeon Kim, Nurrachman Liu, Michael Wieckowski, Gregory Chen, Dennis Sylvester, David Blaauw, and Trevor Mudge. Centip3De: a many-core prototype exploring 3D integration and near-threshold computing. *Communications of the ACM*, 56(11):97–104, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2013:LBPg

[1292] Peter Winkler. Last byte: Puzzled: Coin flipping. *Communications of the ACM*, 56(11):120, November 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ozsu:2013:ABL

[1293] M. Tamer Özsu. ACM books to launch. *Communications of the ACM*, 56(12):5, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2013:SS

[1294] Vinton G. Cerf. Software at scale. *Communications of the ACM*, 56(12): 7, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2013:LEF

[1295] CACM Staff. Letters to the editor: Free the digital natives. *Communications of the ACM*, 56(12):8–9, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2013:BLL

[1296] Mark Guzdial and Valerie Barr. blog@CACM: The lure of live coding; the attraction of small data. *Communications of the ACM*, 56(12):10–11, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Edwards:2013:NLP

[1297] Chris Edwards. News: Life points the way to a new template for chipmaking. *Communications of the ACM*, 56 (12):13–15, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2013:NSB

[1298] Samuel Greengard. News: Seeing the big picture. *Communications of the ACM*, 56(12):16–18, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Frenkel:2013:NCE

[1299] Karen A. Frenkel. News: CS enrollments rise ... at the expense of the humanities? *Communications of the ACM*, 56(12):19–21, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Heeks:2013:EMI

[1300] Richard Heeks. Emerging markets: Information technology impact sourcing. *Communications of the ACM*, 56 (12):22–25, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anderson:2013:HRP

[1301] David Anderson. Historical reflections: Patrick Blackett: providing 'white heat' to the British computing revolution. *Communications of the ACM*, 56(12):26–28, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2013:PID

[1302] Peter J. Denning. The profession of IT: Design thinking. *Communications of the ACM*, 56(12):29–31, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2013:KVL

[1303] George V. Neville-Neil. Kode vicious: A lesson in resource management. *Communications of the ACM*, 56 (12):32–33, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

DuBow:2013:BPB

[1304] Wendy M. DuBow, Ruthe Farmer, Zhen Wu, and Malia Fredrickson. Broadening participation: Bringing young women into computing through the NCWIT Aspirations in Computing program. *Communications of the ACM*, 56(12):34–37, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fox:2013:VMS

[1305] Armando Fox. Viewpoint: From MOOCs to SPOCs. *Communications of the ACM*, 56(12):38–40, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Grigorik:2013:PMW

[1306] Ilya Grigorik. Practice: Making the Web faster with HTTP 2.0. *Communications of the ACM*, 56(12):42–49, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chisnall:2013:PCC

[1307] David Chisnall. Practice: The challenge of cross-language interoperability. *Communications of the ACM*, 56 (12):50–56, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chow:2013:PIR

[1308] Fred Chow. Practice: Intermediate representation. *Communications of the ACM*, 56(12):57–62, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dhar:2013:DSP

[1309] Vasant Dhar. Data science and prediction. *Communications of the ACM*, 56 (12):64–73, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lazar:2013:LAI

[1310] Jonathan Lazar and Harry Hochheiser. Legal aspects of interface accessibility in the U.S. *Communications of the ACM*, 56(12):74–80, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Terry:2013:RDC

[1311] Doug Terry. Replicated data consistency explained through baseball. *Communications of the ACM*, 56(12): 82–89, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tyson:2013:SMI

[1312] Gareth Tyson, Nishanth Sastry, Ruben Cuevas, Ivica Rimac, and Andreas Mauthe. A survey of mobility in information-centric networks. *Communications of the ACM*, 56(12):90–98, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Moss:2013:CGC

[1313] Eliot Moss. The cleanest garbage collection: technical perspective. *Communications of the ACM*, 56(12):100, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bacon:2013:TTW

[1314] David F. Bacon, Perry Cheng, and Sunil Shukla. And then there were none: a stall-free real-time garbage collector for reconfigurable hardware. *Communications of the ACM*, 56(12): 101–109, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2013:LBPh

[1315] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 56(12):126, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2013:LBQc

[1316] Leah Hoffmann. Last byte: Q&A: Securing the risk. *Communications of the ACM*, 56(12):128–ff, December 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2014:SC

[1317] Moshe Y. Vardi. Scalable conferences. *Communications of the ACM*, 57(1): 5, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2014:PVR

[1318] Vinton G. Cerf. From the President; virtual reality redux. *Communications of the ACM*, 57(1):7, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:NER

[1319] CACM Staff. Nominees for elections and report of the ACM Nominating Committee. *Communications of the ACM*, 57(1):8, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:AFA

[1320] CACM Staff. ACM's FY13 annual report. *Communications of the ACM*, 57(1):9–14, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:UDC

[1321] CACM Staff. U.S. does not control the Internet. *Communications of the ACM*, 57(1):16–17, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2014:MNM

[1322] Mark Guzdial and Joel C. Adams. MOOCs need more work; so do CS graduates. *Communications of the ACM*, 57(1):18–19, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anthes:2014:FTI

[1323] Gary Anthes. French team invents faster code-breaking algorithm. *Communications of the ACM*, 57(1):21–23, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2014:HDY

[1324] Tom Geller. How do you feel?: your computer knows. *Communications of the ACM*, 57(1):24–26, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2014:PTE

[1325] Paul Hyman. 'peace technologies' enable eyewitness reporting when disasters strike. *Communications of the ACM*, 57(1):27–29, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2014:LSB

[1326] Michael A. Cusumano. The legacy of Steve Ballmer. *Communications of the ACM*, 57(1):30–32, January 2014.

CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Yoo:2014:TCI

[1327] Christopher S. Yoo. Toward a closer integration of law and computer science. *Communications of the ACM*, 57(1):33–35, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Haigh:2014:ATD

[1328] Thomas Haigh. Actually, Turing did not invent the computer. *Communications of the ACM*, 57(1):36–41, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2014:EE

[1329] Phillip G. Armour. Estimation is not evil. *Communications of the ACM*, 57(1):42–43, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Terry:2014:PNJ

[1330] Doug Terry. Publish now, judge later. *Communications of the ACM*, 57(1):44–46, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bell:2014:SI

[1331] Alex E. Bell. The software inferno. *Communications of the ACM*, 57(1):48–53, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lango:2014:TSD

[1332] Jason Lango. Toward software-defined SLAs. *Communications of the ACM*, 57(1):54–60, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Madhavapeddy:2014:URV

[1333] Anil Madhavapeddy and David J. Scott. Unikernels: the rise of the virtual library operating system. *Communications of the ACM*, 57(1):61–69, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

OHara:2014:TIS

[1334] Kenton O'Hara, Gerardo Gonzalez, Abigail Sellen, Graeme Penney, Andreas Varnavas, Helena Mentis, Antonio Criminisi, Robert Corish, Mark Rouncefield, Neville Dastur, and Tom Carrell. Touchless interaction in surgery. *Communications of the ACM*, 57(1):70–77, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Li:2014:RFN

[1335] Jessica Li, Arun Vishwanath, and H. Raghav Rao. Retweeting the Fukushima nuclear radiation disaster. *Communications of the ACM*, 57(1):78–85, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gramoli:2014:DTP

[1336] Vincent Gramoli and Rachid Guerraoui. Democratizing transactional programming. *Communications of the ACM*, 57(1):86–93, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Huang:2014:HPS

[1337] Xuedong Huang, James Baker, and Raj Reddy. A historical perspective of speech recognition. *Communications of the ACM*, 57(1):94–103, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Iyer:2014:SST

[1338] Subramanian S. Iyer. Silicon stress: technical perspective. *Communications of the ACM*, 57(1):106, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jung:2014:TSA

[1339] Moongon Jung, Joydeep Mitra, David Z. Pan, and Sung Kyu Lim. TSV stress-aware full-chip mechanical reliability analysis and optimization for 3D IC. *Communications of the ACM*, 57 (1):107–115, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shostak:2014:LBF

[1340] Seth Shostak. Last byte: Future tense: The second signal. *Communications of the ACM*, 57(1):128–ff, January 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McGettrick:2014:EA

[1341] Andrew McGettrick. Education, always. *Communications of the ACM*, 57(2):5, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2014:CI

[1342] Vinton G. Cerf. Cognitive implants. *Communications of the ACM*, 57(2): 7, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:CMT

[1343] CACM Staff. Contribute more than algorithmic speculation. *Communications of the ACM*, 57(2):9, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guo:2014:CHC

[1344] Philip Guo. Clarifying human-computer interaction. *Communications of the ACM*, 57(2):10–11, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Monroe:2014:NTM

[1345] Don Monroe. A new type of mathematics? *Communications of the ACM*, 57(2):13–15, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shein:2014:SEL

[1346] Esther Shein. Should everybody learn to code? *Communications of the ACM*, 57(2):16–18, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2014:CPC

[1347] Samuel Greengard. Computational photography comes into focus. *Communications of the ACM*, 57(2):19–21, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:AFI

[1348] CACM Staff. ACM Fellows inducted. *Communications of the ACM*, 57(2):

22, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Burley:2014:WCP

[1349] Diana L. Burley, Jon Eisenberg, and Seymour E. Goodman. Would cybersecurity professionalization help address the cybersecurity crisis? *Communications of the ACM*, 57(2):24–27, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bell:2014:ENC

[1350] Tim Bell. Establishing a nationwide CS curriculum in New Zealand high schools. *Communications of the ACM*, 57(2):28–30, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Young:2014:IAS

[1351] William Young and Nancy G. Leveson. An integrated approach to safety and security based on systems theory. *Communications of the ACM*, 57 (2):31–35, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2014:KVB

[1352] George V. Neville-Neil. Kode vicious: Bugs and bragging rights. *Communications of the ACM*, 57(2):36–37, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ceccagnoli:2014:DPW

[1353] Marco Ceccagnoli, Chris Forman, Peng Huang, and D. J. Wu. Digital platforms: when is participation valuable? *Communications of the ACM*, 57(2):38–39, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Andriole:2014:RT

[1354] Stephen J. Andriole. Ready technology. *Communications of the ACM*, 57(2):40–42, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anonymous:2014:NLP

[1355] Anonymous. Node at LinkedIn: the pursuit of thinner, lighter, faster. *Communications of the ACM*, 57(2):44–51, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kamp:2014:CWS

[1356] Poul-Henning Kamp. Center wheel for success. *Communications of the ACM*, 57(2):52–54, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hensley:2014:PSD

[1357] Zachary Hensley, Jibonananda Sanyal, and Joshua New. Provenance in sensor data management. *Communications of the ACM*, 57(2):55–62, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Holzmann:2014:MC

[1358] Gerard J. Holzmann. Mars code. *Communications of the ACM*, 57(2):64–73, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Avgerinos:2014:AEG

[1359] Thanassis Avgerinos, Sang Kil Cha, Alexandre Rebert, Edward J. Schwartz, Maverick Woo, and David Brumley. Automatic exploit generation. *Communications of the ACM*, 57(2):74–84, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Micali:2014:CMS

[1360] Silvio Micali and Michael O. Rabin. Cryptography miracles, secure auctions, matching problem verification. *Communications of the ACM*, 57(2):85–93, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wilhelm:2014:CTT

[1361] Reinhard Wilhelm and Daniel Grund. Computation takes time, but how much? *Communications of the ACM*, 57(2):94–103, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mahoney:2014:NSO

[1362] Michael W. Mahoney. A new spin on an old algorithm: technical perspective. *Communications of the ACM*, 57(2):106, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ballard:2014:CCS

[1363] Grey Ballard, James Demmel, Olga Holtz, and Oded Schwartz. Communication costs of Strassen's matrix multiplication. *Communications of the ACM*, 57(2):107–114, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2014:LBPa

[1364] Peter Winkler. Last byte: Puzzled: Lowest Number Wins. *Communications of the ACM*, 57(2):120, February 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2014:BST

[1365] Moshe Y. Vardi. Boolean satisfiability: theory and engineering. *Communications of the ACM*, 57(3):5, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2014:LPW

[1366] Vinton G. Cerf. Letter from the President: What if it's us? *Communications of the ACM*, 57(3):7, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:LED

[1367] CACM Staff. Letters to the editor: Develop research culture in the Arab Middle East. *Communications of the ACM*, 57(3):9, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Matsudaira:2014:CSD

[1368] Kate Matsudaira. Capturing and structuring data mined from the web. *Communications of the ACM*, 57(3):10–11, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Klarreich:2014:NRB

[1369] Erica Klarreich. News: Reading brains. *Communications of the ACM*, 57(3):12–14, March 2014. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kirkpatrick:2014:NWW

[1370] Keith Kirkpatrick. News: World without wires. *Communications of the ACM*, 57(3):15–17, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2014:NPH

[1371] Neil Savage. News: Playing at health. *Communications of the ACM*, 57(3):18–19, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2014:LSM

[1372] Pamela Samuelson. Legally speaking: Mass digitization as fair use. *Communications of the ACM*, 57(3):20–22, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Narayanan:2014:CEW

[1373] Arvind Narayanan and Shannon Vallor. Computing ethics: Why software engineering courses should include ethics coverage. *Communications of the ACM*, 57(3):23–25, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2014:PIS

[1374] Peter J. Denning. The profession of IT: 'surfing toward the future'. *Communications of the ACM*, 57(3):26–29, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ladner:2014:BPI

[1375] Richard Ladner. Broadening participation: The impact of the United Nations Convention on the Rights of Persons with Disabilities. *Communications of the ACM*, 57(3):30–32, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Patterson:2014:VHB

[1376] David Patterson. Viewpoint: How to build a bad research center. *Communications of the ACM*, 57(3):33–36, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Golab:2014:ECW

[1377] Wojciech Golab, Muntasir R. Rahman, Alvin AuYoung, Kimberly Keeton, and Xiaozhou (Steve) Li. Eventually consistent: not what you were expecting? *Communications of the ACM*, 57(3):38–44, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sproull:2014:APC

[1378] Robert F. Sproull and Jim Waldo. The API performance contract. *Communications of the ACM*, 57(3):45–51, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kleen:2014:SEL

[1379] Andi Kleen. Scaling existing lock-based applications with lock elision. *Communications of the ACM*, 57(3):52–56, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Yang:2014:MPP

[1380] Junfeng Yang, Heming Cui, Jingyue Wu, Yang Tang, and Gang Hu. Making parallel programs reliable with stable multithreading. *Communications of the ACM*, 57(3):58–69, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Alvarado:2014:UTC

[1381] Christine Alvarado and Eugene Judson. Using targeted conferences to recruit women into computer science. *Communications of the ACM*, 57(3):70–77, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kim:2014:BDA

[1382] Gang-Hoon Kim, Silvana Trimi, and Ji-Hyong Chung. Big-data applications in the government sector. *Communications of the ACM*, 57(3):78–85, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Zielinska:2014:TS

[1383] Elzbieta Zielińska, Wojciech Mazurczyk, and Krzysztof Szczypiorski. Trends in steganography. *Communications of the ACM*, 57(3):86–95, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wallach:2014:SST

[1384] Dan Wallach. Smartphone security 'taint' what it used to be: technical perspective. *Communications of the ACM*, 57(3):98, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Enck:2014:TIF

[1385] William Enck, Peter Gilbert, Byung-Gon Chun, Landon P. Cox, Jaeyeon Jung, Patrick McDaniel, and Anmol N. Sheth. TaintDroid: an information flow tracking system for real-time privacy monitoring on smartphones. *Communications of the ACM*, 57(3):99–106, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2014:LBPb

[1386] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 57(3):109, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2014:LBQa

[1387] Leah Hoffmann. Last byte: Q&A: RISC and reward. *Communications of the ACM*, 57(3):112–ff, March 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Aho:2014:FRS

[1388] Alfred Aho and Georg Gottlob. A front row seat to Communications' editorial transformation. *Communications of the ACM*, 57(4):5, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2014:IGE

[1389] Vinton G. Cerf. The Internet governance ecosystem. *Communications of the ACM*, 57(4):7, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:CMM

[1390] CACM Staff. Code that missed Mars. *Communications of the ACM*, 57(4):9, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2014:EF

[1391] Mark Guzdial and Daniel Reed. Eyes forward. *Communications of the ACM*, 57(4):10–11, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Edwards:2014:UPD

[1392] Chris Edwards. Using patient data for personalized cancer treatments. *Communications of the ACM*, 57(4):13–15, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hyman:2014:SST

[1393] Paul Hyman. Speech-to-speech translations stutter, but researchers see mellifluous future. *Communications of the ACM*, 57(4):16–19, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mone:2014:NMC

[1394] Gregory Mone. New models in cosmetics replacing animal testing. *Communications of the ACM*, 57(4):20–21, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cusumano:2014:MRS

[1395] Michael A. Cusumano. MOOCs revisited, with some policy suggestions. *Communications of the ACM*, 57(4): 24–26, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Best:2014:TOC

[1396] Michael L. Best. Thinking outside the continent. *Communications of the ACM*, 57(4):27–29, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2014:KVFa

[1397] George V. Neville-Neil. Kode vicious: This is the foo field. *Communications of the ACM*, 57(4):30–31, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Estrin:2014:SDW

[1398] Deborah Estrin. Small data, where $n = \mathrm{me}$. *Communications of the ACM*, 57(4):32–34, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vishkin:2014:MHG

[1399] Uzi Vishkin. Is multicore hardware for general-purpose parallel processing broken? *Communications of the ACM*, 57(4):35–39, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vixie:2014:RLS

[1400] Paul Vixie. Rate-limiting state. *Communications of the ACM*, 57(4):40–43, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jacobson:2014:MLS

[1401] Ivar Jacobson, Pan-Wei Ng, Ian Spence, and Paul E. McMahon. Majorleague SEMAT: why should an executive care? *Communications of the ACM*, 57(4):44–50, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Paasch:2014:MT

[1402] Christoph Paasch and Olivier Bonaventure. Multipath TCP. *Communications of the ACM*, 57(4):51–57, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Seaton:2014:WDW

[1403] Daniel T. Seaton, Yoav Bergner, Isaac Chuang, Piotr Mitros, and David E. Pritchard. Who does what in a massive open online course? *Communications of the ACM*, 57(4):58–65, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Avigad:2014:FVM

[1404] Jeremy Avigad and John Harrison. Formally verified mathematics. *Communications of the ACM*, 57(4):66–75, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Odersky:2014:UFO

[1405] Martin Odersky and Tiark Rompf. Unifying functional and object-oriented programming with Scala. *Communications of the ACM*, 57(4):76–86, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Roesner:2014:SPA

[1406] Franziska Roesner, Tadayoshi Kohno, and David Molnar. Security and privacy for augmented reality systems. *Communications of the ACM*, 57(4):88–96, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Warren:2014:RSD

[1407] Joe Warren. A 'reasonable' solution to deformation methods: technical perspective. *Communications of the ACM*, 57(4):98, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jacobson:2014:BBW

[1408] Alec Jacobson, Ilya Baran, Jovan Popović, and Olga Sorkine-Hornung. Bounded biharmonic weights for real-time deformation. *Communications of the ACM*, 57(4):99–106, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

MacLeod:2014:LBF

[1409] Ken MacLeod. Last byte: Future tense: Re: Search. *Communications of the ACM*, 57(4):112–ff, April 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2014:MLS

[1410] Moshe Y. Vardi. Moore's law and the sand-heap paradox. *Communications of the ACM*, 57(5):5, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2014:SIT

[1411] Vinton G. Cerf. Sometimes it takes some time! *Communications of the ACM*, 57(5):7, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:KYS

[1412] CACM Staff. Know your steganographic enemy. *Communications of the ACM*, 57(5):8, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:AGE

[1413] CACM Staff. ACM's 2014 general election: please take this opportunity to vote. *Communications of the ACM*, 57(5):9–17, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Robertson:2014:RHT

[1414] Judy Robertson. Rethinking how to teach programming to newcomers. *Communications of the ACM*, 57(5):18–19, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2014:HCC

[1415] Samuel Greengard. How computers are changing biology. *Communications of the ACM*, 57(5):21–23, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Geller:2014:FD

[1416] Tom Geller. The forever disc. *Communications of the ACM*, 57(5):24–26, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kirkpatrick:2014:TCC

[1417] Keith Kirkpatrick. Technology confounds the courts. *Communications of the ACM*, 57(5):27–29, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

VanAlstyne:2014:WBV

[1418] Marshall Van Alstyne. Why Bitcoin has value. *Communications of the ACM*, 57(5):30–32, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Depoorter:2014:WHV

[1419] Ben Depoorter. What happened to video game piracy? *Communications of the ACM*, 57(5):33–34, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anderson:2014:TKT

[1420] David Anderson. Tom Kilburn: a tale of five computers. *Communications of the ACM*, 57(5):35–38, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cooper:2014:BVC

[1421] Steve Cooper, Shuchi Grover, and Beth Simon. Building a virtual community of practice for K-12 CS teachers. *Communications of the ACM*, 57(5):39–41, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bajcsy:2014:RC

[1422] Ruzena Bajcsy. Robots are coming. *Communications of the ACM*, 57(5):42–43, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Toxen:2014:NSS

[1423] Bob Toxen. The NSA and Snowden: securing the all-seeing eye. *Communi-*

cations of the ACM, 57(5):44–51, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Carata:2014:PP

[1424] Lucian Carata, Sherif Akoush, Nikilesh Balakrishnan, Thomas Bytheway, Ripduman Sohan, Margo Seltzer, and Andy Hopper. A primer on provenance. *Communications of the ACM*, 57(5):52–60, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lloyd:2014:DSE

[1425] Wyatt Lloyd, Michael J. Freedman, Michael Kaminsky, and David G. Andersen. Don't settle for eventual consistency. *Communications of the ACM*, 57(5):61–68, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Nanavati:2014:CSG

[1426] Mihir Nanavati, Patrick Colp, Bill Aiello, and Andrew Warfield. Cloud security: a gathering storm. *Communications of the ACM*, 57(5):70–79, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Pass:2014:RSV

[1427] Shimeon Pass and Boaz Ronen. Reducing the software value gap. *Communications of the ACM*, 57(5):80–87, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Liu:2014:CSA

[1428] Manlu Liu, Sean Hansen, and Qiang Tu. The community source approach to software development and the Kuali experience. *Communications of the ACM*, 57(5):88–96, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Leyton-Brown:2014:UEH

[1429] Kevin Leyton-Brown, Holger H. Hoos, Frank Hutter, and Lin Xu. Understanding the empirical hardness of NP-complete problems. *Communications of the ACM*, 57(5):98–107, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Juels:2014:INC

[1430] Ari Juels and Bonnie Wong. The interplay of neuroscience and cryptography: technical perspective. *Communications of the ACM*, 57(5):109, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bojinov:2014:NMC

[1431] Hristo Bojinov, Daniel Sanchez, Paul Reber, Dan Boneh, and Patrick Lincoln. Neuroscience meets cryptography: crypto primitives secure against rubber hose attacks. *Communications of the ACM*, 57(5):110–118, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2014:LBPc

[1432] Peter Winkler. Last byte: Puzzled: A sort, of sorts. *Communications of the ACM*, 57(5):120, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sahami:2014:CSC

[1433] Mehran Sahami and Steve Roach. Computer science curricula 2013 released. *Communications of the ACM*, 57(6):5, June 2014. CODEN CACMA2.

ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2014:LPH

[1434] Vinton G. Cerf. Letter from the President: The house elves of ACM. *Communications of the ACM*, 57(6):7, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:LEE

[1435] CACM Staff. Letters to the Editor: Efficient code to counter dying Moore's Law. *Communications of the ACM*, 57(6):9, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Reed:2014:BFI

[1436] Daniel Reed and Chris Stephenson. BLOG@ACM: First impressions, unexpected benefits. *Communications of the ACM*, 57(6):10–11, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Monroe:2014:NCG

[1437] Don Monroe. Neuromorphic computing gets ready for the (really) big time. *Communications of the ACM*, 57(6):13–15, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2014:TC

[1438] Neil Savage. Time for a change. *Communications of the ACM*, 57(6):16–18, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:VMB

[1439] CACM Staff. Visualizations make big data meaningful. *Communications of the ACM*, 57(6):19–21, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2014:GA

[1440] Neil Savage. General agreement. *Communications of the ACM*, 57(6):22–23, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anderson:2014:IRE

[1441] Ross Anderson and Steven J. Murdoch. Inside risks: EMV: why payment systems fail. *Communications of the ACM*, 57(6):24–28, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Armour:2014:BSO

[1442] Phillip G. Armour. The business of software: Owning and using. *Communications of the ACM*, 57(6):29–30, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Florencio:2014:PSF

[1443] Dinei Florêncio, Cormac Herley, and Adam Shostack. Privacy and security: FUD: a plea for intolerance. *Communications of the ACM*, 57(6):31–33, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2014:PIA

[1444] Peter J. Denning. The profession of IT: Avalanches are coming. *Communications of the ACM*, 57(6):34–36, June

2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2014:KVL

[1445] George V. Neville-Neil. Kode vicious: The logic of logging. *Communications of the ACM*, 57(6):37–38, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Davis:2014:VBD

[1446] Charles K. Davis. Viewpoint: Beyond data and analysis. *Communications of the ACM*, 57(6):39–41, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gill:2014:DSL

[1447] Andy Gill. Domain-specific languages and code synthesis using Haskell. *Communications of the ACM*, 57(6):42–49, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Meijer:2014:CEM

[1448] Erik Meijer. The curse of the excluded middle. *Communications of the ACM*, 57(6):50–55, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Svensson:2014:DET

[1449] Bo Joel Svensson, Mary Sheeran, and Ryan R. Newton. Design exploration through code-generating DSLs. *Communications of the ACM*, 57(6):56–63, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Siaterlis:2014:CPT

[1450] Christos Siaterlis and Béla Genge. Cyber-physical testbeds. *Communications of the ACM*, 57(6):64–73, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fan:2014:PSM

[1451] Weiguo Fan and Michael D. Gordon. The power of social media analytics. *Communications of the ACM*, 57(6):74–81, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rosner:2014:DCP

[1452] Daniela Rosner, Marco Roccetti, and Gustavo Marfia. The digitization of cultural practices. *Communications of the ACM*, 57(6):82–87, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Musial:2014:IDS

[1453] Peter Musial, Nicolas Nicolaou, and Alexander A. Shvartsman. Implementing distributed shared memory for dynamic networks. *Communications of the ACM*, 57(6):88–98, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

vandePanne:2014:MFI

[1454] Michiel van de Panne. Motion fields for interactive character animation: technical perspective. *Communications of the ACM*, 57(6):100, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lee:2014:MFI

[1455] Yongjoon Lee, Kevin Wampler, Gilbert Bernstein, Jovan Popović, and Zoran Popović. Motion fields for interactive character locomotion. *Communications of the ACM*, 57(6):101–108, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2014:LBPd

[1456] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 57(6):110, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hoffmann:2014:LBQb

[1457] Leah Hoffmann. Last byte: Q&A: Divide and conquer. *Communications of the ACM*, 57(6):112–ff, June 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hanson:2014:EWC

[1458] Vicki Hanson, Reyyan Ayfer, and Bev Bachmayer. European women in computing. *Communications of the ACM*, 57(7):5, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2014:RP

[1459] Vinton G. Cerf. Responsible programming. *Communications of the ACM*, 57(7):7, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:SWL

[1460] CACM Staff. Snowden weak link: copying to USB device. *Communications of the ACM*, 57(7):8–9, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2014:DTP

[1461] Mark Guzdial and Philip Guo. The difficulty of teaching programming languages, and the benefits of hands-on learning. *Communications of the ACM*, 57(7):10–11, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wright:2014:BDM

[1462] Alex Wright. Big data meets big science. *Communications of the ACM*, 57(7):13–15, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kugler:2014:RCD

[1463] Logan Kugler. Robots compete in disaster scenarios. *Communications of the ACM*, 57(7):16–18, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shein:2014:HPS

[1464] Esther Shein. Holographic projection systems provide eternal life. *Communications of the ACM*, 57(7):19–21, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Samuelson:2014:LSW

[1465] Pamela Samuelson. Legally speaking: Watching TV on Internet-connected devices. *Communications of the ACM*, 57(7):22–24, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Huff:2014:CET

[1466] Chuck Huff and Almut Furchert. Computing ethics: Toward a pedagogy of ethical practice. *Communications of the ACM*, 57(7):25–27, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sako:2014:TSM

[1467] Mari Sako. Technology strategy and management: The business of the state. *Communications of the ACM*, 57(7):28–30, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Margolis:2014:BPC

[1468] Jane Margolis, Joanna Goode, Gail Chapman, and Jean J. Ryoo. Broadening participation: That classroom 'magic'. *Communications of the ACM*, 57(7):31–33, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Friedman:2014:VSC

[1469] Batya Friedman. Viewpoint: Structural challenges and the need to adapt. *Communications of the ACM*, 57(7): 34–37, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Laplante:2014:VLP

[1470] Phillip A. Laplante. Viewpoint: Licensing professional software engineers: seize the opportunity. *Communications of the ACM*, 57(7):38–40, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wadlow:2014:WMY

[1471] Thomas Wadlow. Who must you trust? *Communications of the ACM*, 57(7):42–49, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anonymous:2014:AQT

[1472] Anonymous. Automated QA testing at electronic arts. *Communications of the ACM*, 57(7):50–57, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bland:2014:FMT

[1473] Mike Bland. Finding more than one worm in the apple. *Communications of the ACM*, 57(7):58–64, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Faulkner:2014:CSR

[1474] Matthew Faulkner, Robert Clayton, Thomas Heaton, K. Mani Chandy, Monica Kohler, Julian Bunn, Richard Guy, Annie Liu, Michael Olson, MingHei Cheng, and Andreas Krause. Community sense and response systems: your phone as quake detector. *Communications of the ACM*, 57(7): 66–75, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ben-Yehuda:2014:RRR

[1475] Orna Agmon Ben-Yehuda, Muli Ben-Yehuda, Assaf Schuster, and Dan Tsafrir. The rise of RaaS: the Resource-as-a-Service cloud. *Communications of the ACM*, 57(7):76–84, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Jagadish:2014:BDT

[1476] H. V. Jagadish, Johannes Gehrke, Alexandros Labrinidis, Yannis Papakonstantinou, Jignesh M. Patel, Raghu Ramakrishnan, and Cyrus Shahabi. Big data and its technical challenges. *Communications of the ACM*, 57(7):86–94, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Papagiannaki:2014:PJM

[1477] Konstantina (Dina) Papagiannaki. The power of joint multiuser beamforming: technical perspective. *Communications of the ACM*, 57(7):96, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Rahul:2014:JSW

[1478] Hariharan Rahul, Swarun Kumar, and Dina Katabi. JMB: scaling wireless capacity with user demands. *Communications of the ACM*, 57(7):97–106, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Landis:2014:LBF

[1479] Geoffrey A. Landis. Last byte: Future tense: The Chatbot and the Drone. *Communications of the ACM*, 57(7):112–ff, July 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2014:ELO

[1480] Moshe Y. Vardi. Editor's letter: Openism, IPism, fundamentalism, and pragmatism. *Communications of the ACM*, 57(8):5, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2014:CAP

[1481] Vinton G. Cerf. Cerf's up: ACM and the professional programmer. *Communications of the ACM*, 57(8):7, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guzdial:2014:BWU

[1482] Mark Guzdial. BLOG@CACM: Why the U.S. is not ready for mandatory CS education. *Communications of the ACM*, 57(8):8–9, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Edwards:2014:NRP

[1483] Chris Edwards. News: Researchers probe security through obscurity. *Communications of the ACM*, 57(8):11–13, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kirkpatrick:2014:NSR

[1484] Keith Kirkpatrick. News: Surgical robots deliver care more precisely. *Communications of the ACM*, 57(8):14–16, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Klarreich:2014:NHM

[1485] Erica Klarreich. News: Hello, my name is .... *Communications of the ACM*, 57(8):17–19, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gurses:2014:PSC

[1486] Seda Gürses. Privacy and security: Can you engineer privacy? *Communications of the ACM*, 57(8):20–23, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wilensky:2014:EFC

[1487] Uri Wilensky, Corey E. Brady, and Michael S. Horn. Education: Fostering computational literacy in science classrooms. *Communications of the ACM*, 57(8):24–28, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Coward:2014:GCP

[1488] Chris Coward. Global computing: Private then shared? *Communications of the ACM*, 57(8):29–30, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Neville-Neil:2014:KVFb

[1489] George V. Neville-Neil. Kode vicious: Forked over. *Communications of the ACM*, 57(8):31–32, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Levy:2014:VRR

[1490] Frank Levy and Richard J. Murnane. Viewpoint: Researching the robot revolution. *Communications of the ACM*, 57(8):33–35, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Teevan:2014:VSS

[1491] Jaime Teevan, Kevyn Collins-Thompson, Ryen W. White, and Susan Dumais. Viewpoint: Slow search. *Communications of the ACM*, 57(8):36–38, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cavage:2014:BAC

[1492] Mark Cavage and David Pacheco. Bringing arbitrary compute to authoritative data. *Communications of the ACM*, 57(8):40–48, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kamp:2014:QSC

[1493] Poul-Henning Kamp. Quality software costs money — Heartbleed was free. *Communications of the ACM*, 57(8):49–51, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lutz:2014:USE

[1494] Michael J. Lutz, J. Fernando Naveda, and James R. Vallino. Undergraduate software engineering. *Communications of the ACM*, 57(8):52–58, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Spezzano:2014:RTN

[1495] Francesca Spezzano, V. S. Subrahmanian, and Aaron Mannes. Reshaping terrorist networks. *Communications of the ACM*, 57(8):60–69, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gulwani:2014:EBL

[1496] Sumit Gulwani. Example-based learning in computer-aided STEM education. *Communications of the ACM*, 57(8):70–80, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Goldberg:2014:EMF

[1497] Andrew V. Goldberg and Robert E. Tarjan. Efficient maximum flow algorithms. *Communications of the ACM*, 57(8):82–89, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bernstein:2014:GCD

[1498] Philip A. Bernstein. Getting consensus for data replication: technical perspective. *Communications of the ACM*, 57(8):92, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bailis:2014:LBQ

[1499] Peter Bailis, Shivaram Venkataraman, Michael J. Franklin, Joseph M. Hellerstein, and Ion Stoica. Last byte: Quantifying eventual consistency with PBS. *Communications of the ACM*, 57(8):93–102, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2014:LBPe

[1500] Peter Winkler. Last byte: Puzzled: Paths and matchings. *Communications of the ACM*, 57(8):104, August 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Vardi:2014:ELW

[1501] Moshe Y. Vardi. Editor's letter: Would Turing have passed the Turing Test? *Communications of the ACM*, 57(9):5, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Cerf:2014:CAR

[1502] Vinton G. Cerf. Cerf's up: Augmented reality. *Communications of the ACM*, 57(9):7, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Staff:2014:LEP

[1503] CACM Staff. Letters to the Editor: Provenance of British computing. *Communications of the ACM*, 57(9):8–9, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Guo:2014:BRS

[1504] Philip Guo. BLOG@CACM: Refining students' coding and reviewing skills. *Communications of the ACM*, 57(9):10–11, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greengard:2014:NWN

[1505] Samuel Greengard. News: Weathering a new era of big data. *Communications of the ACM*, 57(9):12–14, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Savage:2014:NPM

[1506] Neil Savage. News: The power of memory. *Communications of the ACM*, 57 (9):15–17, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Mone:2014:NND

[1507] Gregory Mone. News: The new digital medicine. *Communications of the ACM*, 57(9):18–20, September 2014.

CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bechtold:2014:LTA

[1508] Stefan Bechtold and Adrian Perrig. Law and technology: Accountability in future Internet architectures. *Communications of the ACM*, 57(9): 21–23, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Haigh:2014:HRW

[1509] Thomas Haigh. Historical reflections: We have never been digital. *Communications of the ACM*, 57(9):24–28, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Denning:2014:PIL

[1510] Peter J. Denning. The profession of IT: Learning for the new digital age. *Communications of the ACM*, 57 (9):29–31, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Muehlhauser:2014:VEE

[1511] Luke Muehlhauser and Bill Hibbard. Viewpoint: Exploratory engineering in artificial intelligence. *Communications of the ACM*, 57(9):32–34, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

King:2014:VSI

[1512] John Leslie King and Paul F. Uhlir. Viewpoint: Soft infrastructure challenges to scientific knowledge discovery. *Communications of the ACM*, 57 (9):35–37, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kern:2014:STW

[1513] Christoph Kern. Securing the tangled web. *Communications of the ACM*, 57 (9):38–47, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bailis:2014:NR

[1514] Peter Bailis and Kyle Kingsbury. The network is reliable. *Communications of the ACM*, 57(9):48–55, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Daries:2014:PAB

[1515] Jon P. Daries, Justin Reich, Jim Waldo, Elise M. Young, Jonathan Whittinghill, Andrew Dean Ho, Daniel Thomas Seaton, and Isaac Chuang. Privacy, anonymity, and big data in the social sciences. *Communications of the ACM*, 57(9):56–63, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Herley:2014:SCS

[1516] Cormac Herley. Security, cybercrime, and scale. *Communications of the ACM*, 57(9):64–71, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Tsikerdekis:2014:ODS

[1517] Michail Tsikerdekis and Sherali Zeadally. Online deception in social media. *Communications of the ACM*, 57(9):72–80, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Laumond:2014:ORM

[1518] Jean-Paul Laumond, Nicolas Mansard, and Jean-Bernard Lasserre. Optimality in robot motion: optimal versus optimized motion. *Communications of the ACM*, 57(9):82–89, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Efros:2014:PAB

[1519] Alexei A. Efros. Portraiture in the age of big data: technical perspective. *Communications of the ACM*, 57(9):92, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kemelmacher-Shlizerman:2014:MP

[1520] Ira Kemelmacher-Shlizerman, Eli Shechtman, Rahul Garg, and Steven M. Seitz. Moving portraits. *Communications of the ACM*, 57(9):93–99, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Winkler:2014:LBPf

[1521] Peter Winkler. Last byte: Puzzled: Solutions and sources. *Communications of the ACM*, 57(9):102, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Krakovsky:2014:LBQ

[1522] Marina Krakovsky. Last byte: Q&A: Finding themes. *Communications of the ACM*, 57(9):104–ff, September 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

White:2014:ACO

[1523] John White. ACM's challenges and opportunities. *Communications of the ACM*, 57(10):5, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/10/178792/fulltext`.

Cerf:2014:CUC

[1524] Vinton G. Cerf. Cerf's up: Unconventional computing. *Communications of the ACM*, 57(10):7, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/10/178793/fulltext`.

Staff:2014:LER

[1525] CACM Staff. Letters to the Editor: Responsible programming not a technical issue. *Communications of the ACM*, 57(10):8–9, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/10/178772/fulltext`.

Langford:2014:BFR

[1526] John Langford and Mark Guzdial. BLOG@CACM: Finding a research job, and teaching CS in high school. *Communications of the ACM*, 57(10):10–11, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/10/178786/fulltext`.

Monroe:2014:NSS

[1527] Don Monroe. News: Still seeking the optical transistor. *Communications of the ACM*, 57(10):

13–15, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178773/fulltext.

Savage:2014:NGE

[1528] Neil Savage. News: Gradual evolution. *Communications of the ACM*, 57(10):16–18, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178775/fulltext.

Subbaraman:2014:NMG

[1529] Nidhi Subbaraman. News: Museums go high-tech with digital forensics. *Communications of the ACM*, 57(10):19–21, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178774/fulltext.

Cusumano:2014:TSM

[1530] Michael A. Cusumano. Technology strategy and management: The Bitcoin ecosystem. *Communications of the ACM*, 57(10):22–24, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178782/fulltext.

Neumann:2014:IRR

[1531] Peter G. Neumann. Inside risks: Risks and myths of cloud computing and cloud storage. *Communications of the ACM*, 57(10):25–27, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178776/fulltext.

Neville-Neil:2014:KVO

[1532] George V. Neville-Neil. Kode vicious: Outsourcing responsibility. *Communications of the ACM*, 57(10):28–29, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178777/fulltext.

Armour:2014:BSV

[1533] Phillip G. Armour. The business of software: Vendor: vidi, vici. *Communications of the ACM*, 57(10):30–31, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178778/fulltext.

Lucas:2014:VDT

[1534] Henry Lucas. Viewpoint: Disrupting and transforming the university. *Communications of the ACM*, 57(10):32–35, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178788/fulltext.

Daylight:2014:VTT

[1535] Edgar G. Daylight. Viewpoint: A Turing tale. *Communications of the ACM*, 57(10):36–38, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178787/fulltext.

Laurie:2014:CT

[1536] Ben Laurie. Certificate transparency. *Communications of the ACM*, 57 (10):40–46, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178780/fulltext.

Arnbak:2014:SCH

[1537] Axel Arnbak, Hadi Asghari, Michel Van Eeten, and Nico Van Eijk. Security collapse in the HTTPS market. *Communications of the ACM*, 57 (10):47–55, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178779/fulltext.

Goldberg:2014:WIT

[1538] Sharon Goldberg. Why is it taking so long to secure Internet routing? *Communications of the ACM*, 57(10):56–63, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178781/fulltext.

Samet:2014:RNM

[1539] Hanan Samet, Jagan Sankaranarayanan, Michael D. Lieberman, Marco D. Adelfio, Brendan C. Fruin, Jack M. Lotkowski, Daniele Panozzo, Jon Sperling, and Benjamin E. Teitler. Reading news with maps by exploiting spatial synonyms. *Communications of the ACM*, 57(10): 64–77, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178784/fulltext.

Vrandecic:2014:WFC

[1540] Denny Vrandecić and Markus Krötzsch. Wikidata: a free collaborative knowledgebase. *Communications of the ACM*, 57(10):78–85, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178785/fulltext.

Casado:2014:ASD

[1541] Martin Casado, Nate Foster, and Arjun Guha. Abstractions for software-defined networks. *Communications of the ACM*, 57(10): 86–95, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178789/fulltext.

Preneel:2014:APM

[1542] Bart Preneel. Attacking a problem from the middle: technical perspective. *Communications of the ACM*, 57(10):97, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178790/fulltext.

Dinur:2014:DNP

[1543] Itai Dinur, Orr Dunkelman, Nathan Keller, and Adi Shamir. Dissection: a new paradigm for solving bicomposite search problems. *Communications of the ACM*, 57(10): 98–105, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http:/

/cacm.acm.org/magazines/2014/10/178791/fulltext.

Wilson:2014:LBF

[1544] Daniel H. Wilson. Last byte: Future tense: Garden of life. *Communications of the ACM*, 57(10): 112–ff, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/10/178783/fulltext.

Wolf:2014:DDL

[1545] Alexander L. Wolf. Dealing with the deep, long-term challenges facing ACM (part I). *Communications of the ACM*, 57(11):5, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179834/fulltext.

Cerf:2014:HLF

[1546] Vinton G. Cerf. Heidelberg Laureate Forum II. *Communications of the ACM*, 57(11):7, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179833/fulltext.

Staff:2014:LEA

[1547] CACM Staff. Letters to the Editor: Accountability is no excuse for surveillance. *Communications of the ACM*, 57(11):9, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179829/fulltext.

Guzdial:2014:BTT

[1548] Mark Guzdial and Lawrence M. Fisher. BLOG@CACM: Teach the teachers, and contribute to humanity. *Communications of the ACM*, 57(11): 10–11, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179819/fulltext.

Anthes:2014:NRS

[1549] Gary Anthes. News: Researchers simplify parallel programming. *Communications of the ACM*, 57(11): 13–15, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179812/fulltext.

Shein:2014:NCW

[1550] Esther Shein. News: Computing what fits. *Communications of the ACM*, 57 (11):16–19, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179814/fulltext.

Kugler:2014:NKO

[1551] Logan Kugler. News: Keeping online reviews honest. *Communications of the ACM*, 57(11): 20–23, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179813/fulltext.

Malhotra:2014:EBD

[1552] Arvind Malhotra and Marshall Van Alstyne. Economic and business dimensions: The dark side of the sharing economy ... and how to lighten it. *Communications of the ACM*, 57 (11):24–27, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/11/179830/fulltext`.

Samuelson:2014:LSU

[1553] Pamela Samuelson. Legally speaking: Updates on the intellectual property front. *Communications of the ACM*, 57 (11):28–30, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/11/179831/fulltext`.

Barocas:2014:CEB

[1554] Solon Barocas and Helen Nissenbaum. Computing ethics: Big data's end run around procedural privacy protections. *Communications of the ACM*, 57 (11):31–33, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/11/179832/fulltext`.

Cooper:2014:EFC

[1555] Steve Cooper, Shuchi Grover, Mark Guzdial, and Beth Simon. Education: A future for computing education research. *Communications of the ACM*, 57(11):34–36, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/11/179828/fulltext`.

Landau:2014:PSS

[1556] Susan Landau. Privacy and security: Summing up. *Communications of the ACM*, 57(11):37–39, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/11/179815/fulltext`.

Klein:2014:VER

[1557] Mark Klein and Gregorio Convertino. Viewpoint: An embarrassment of riches. *Communications of the ACM*, 57(11):40–42, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/11/179816/fulltext`.

August:2014:VDU

[1558] Terrence August, Robert August, and Hyoduk Shin. Viewpoint: Designing user incentives for cybersecurity. *Communications of the ACM*, 57(11):43–46, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/11/179818/fulltext`.

Chisa:2014:EPM

[1559] Ellen Chisa. Evolution of the product manager. *Communications of the ACM*, 57(11):48–52, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/11/179824/fulltext`.

Liu:2014:JNU

[1560] Alex Liu. JavaScript and the Netflix user interface. *Communications of the ACM*, 57(11):53–59, November 2014. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179826/fulltext.

Richards:2014:DPP

[1561] John T. Richards, Jonathan Brezin, Calvin B. Swart, and Christine A. Halverson. A decade of progress in parallel programming productivity. *Communications of the ACM*, 57 (11):60–66, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179825/fulltext.

Gould:2014:SUL

[1562] Stephen Gould and Xuming He. Scene understanding by labeling pixels. *Communications of the ACM*, 57(11): 68–77, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179821/fulltext.

DeMeo:2014:FMT

[1563] Pasquale De Meo, Emilio Ferrara, Giacomo Fiumara, and Alessandro Provetti. On Facebook, most ties are weak. *Communications of the ACM*, 57 (11):78–84, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179820/fulltext.

Nelson:2014:DD

[1564] Beryl Nelson. The data on diversity. *Communications of the ACM*, 57 (11):86–95, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179827/fulltext.

Rusinkiewicz:2014:IDF

[1565] Szymon Rusinkiewicz. The intricate dance of fabric and light: technical perspective. *Communications of the ACM*, 57(11):97, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179822/fulltext.

Zhao:2014:BVA

[1566] Shuang Zhao, Wenzel Jakob, Steve Marschner, and Kavita Bala. Building volumetric appearance models of fabric using micro CT imaging. *Communications of the ACM*, 57(11): 98–105, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179823/fulltext.

Shasha:2014:LBU

[1567] Dennis Shasha. Last byte: Upstart puzzles. *Communications of the ACM*, 57(11):120, November 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/11/179817/fulltext.

Schnabel:2014:PCC

[1568] Bobby Schnabel and John White. Pathways to computing careers. *Communications of the ACM*, 57 (12):5, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180779/fulltext.

Cerf:2014:CDI

[1569] Vinton G. Cerf. Cerf's up: Does innovation create or destroy jobs? *Communications of the ACM*, 57 (12):7, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/12/180778/fulltext`.

Staff:2014:LES

[1570] CACM Staff. Letters to the Editor: On the significance of Turing's test. *Communications of the ACM*, 57(12):8–9, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/12/180771/fulltext`.

Guzdial:2014:BMS

[1571] Mark Guzdial. BLOG@CACM: Meeting student and teacher needs in computing education. *Communications of the ACM*, 57(12): 10–11, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/12/180772/fulltext`.

Edwards:2014:NDL

[1572] Chris Edwards. News: Decoding the language of human movement. *Communications of the ACM*, 57(12): 12–14, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/12/180790/fulltext`.

Mone:2014:NIL

[1573] Gregory Mone. News: Intelligent living. *Communications of the ACM*, 57 (12):15–16, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/12/180786/fulltext`.

Kirkpatrick:2014:NSS

[1574] Keith Kirkpatrick. News: Sensors for seniors. *Communications of the ACM*, 57(12):17–19, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/12/180784/fulltext`.

Staff:2014:NAT

[1575] CACM Staff. News: ACM's Turing Award prize raised to $1 million. *Communications of the ACM*, 57(12):20, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/12/180785/fulltext`.

Best:2014:GCI

[1576] Michael L. Best. Global computing: The Internet that Facebook built. *Communications of the ACM*, 57(12): 21–23, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2014/12/180792/fulltext`.

Denning:2014:PIW

[1577] Peter J. Denning. The profession of IT: The whole professional. *Communications of the ACM*, 57(12): 24–27, December 2014. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180773/fulltext.

Whitney:2014:BPI

[1578] Telle Whitney and Elizabeth Ames. Broadening participation: Innovation and inclusion. *Communications of the ACM*, 57(12):28–30, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180782/fulltext.

Neville-Neil:2014:KVP

[1579] George V. Neville-Neil. Kode vicious: Port squatting. *Communications of the ACM*, 57(12):31–32, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180774/fulltext.

Naedele:2014:VMC

[1580] Martin Naedele, Rick Kazman, and Yuanfang Cai. Viewpoint: Making the case for a "manufacturing execution system" for software development. *Communications of the ACM*, 57(12):33–36, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180780/fulltext.

Meijer:2014:REE

[1581] Erik Meijer and Vikram Kapoor. The responsive enterprise: embracing the hacker way. *Communications of the ACM*, 57(12):38–43, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180776/fulltext.

Chisnall:2014:NST

[1582] David Chisnall. No such thing as a general-purpose processor. *Communications of the ACM*, 57(12):44–48, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180775/fulltext.

Jacobson:2014:NSE

[1583] Ivar Jacobson and Ed Seidewitz. A new software engineering. *Communications of the ACM*, 57(12):49–54, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180777/fulltext.

Marsella:2014:CMH

[1584] Stacy Marsella and Jonathan Gratch. Computationally modeling human emotion. *Communications of the ACM*, 57(12):56–67, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180787/fulltext.

Silberstein:2014:GCO

[1585] Mark Silberstein, Bryan Ford, and Emmett Witchel. GPUfs: the case for operating system services on GPUs. *Communications of the ACM*, 57(12):68–79, December 2014. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180783/fulltext.

Jennings:2014:HAC

[1586] N. R. Jennings, L. Moreau, D. Nicholson, S. Ramchurn, S. Roberts, T. Rodden, and A. Rogers. Human-agent collectives. *Communications of the ACM*, 57(12):80–88, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180791/fulltext.

Keckler:2014:RCT

[1587] Stephen W. Keckler. Rethinking caches for throughput processors: technical perspective. *Communications of the ACM*, 57(12): 90, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180788/fulltext.

Rogers:2014:LYL

[1588] Timothy G. Rogers, Mike O'Connor, and Tor M. Aamodt. Learning your limit: managing massively multithreaded caches through scheduling. *Communications of the ACM*, 57 (12):91–98, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180789/fulltext.

Mone:2014:LBQ

[1589] Gregory Mone. Last byte: Q&A: From Esterel to HipHop. *Communications of the ACM*, 57(12): 120–ff, December 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2014/12/180781/fulltext.

Vardi:2015:ELR

[1590] Moshe Y. Vardi. Editor's letter: The rise and fall of industrial research labs. *Communications of the ACM*, 58(1):5, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181626/fulltext.

Cerf:2015:CLW

[1591] Vinton G. Cerf. Cerf's up: A long way to have come and still to go. *Communications of the ACM*, 58(1): 7, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181625/fulltext.

Staff:2015:LET

[1592] CACM Staff. Letters to the Editor: Toward a map interface not inherently related to geography. *Communications of the ACM*, 58(1):8–9, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181617/fulltext.

Staff:2015:LEAa

[1593] CACM Staff. Letters to the Editor: ACM's FY14 annual report. *Communications of the ACM*, 58(1):11–15, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.

acm.org/magazines/2015/1/181627/fulltext.

Barr:2015:BVL

[1594] Valerie Barr and Michael Stonebraker. BLOG@CACM: A valuable lesson, and whither Hadoop? *Communications of the ACM*, 58(1):18–19, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181612/fulltext.

Klarreich:2015:NSB

[1595] Erica Klarreich. News: In search of Bayesian inference. *Communications of the ACM*, 58(1):21–24, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181628/fulltext.

Greengard:2015:NST

[1596] Samuel Greengard. News: Smart transportation networks drive gains. *Communications of the ACM*, 58(1):25–27, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181630/fulltext.

Anthes:2015:NDB

[1597] Gary Anthes. News: Data brokers are watching you. *Communications of the ACM*, 58(1):28–30, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181629/fulltext.

Fisher:2015:NGB

[1598] Lawrence M. Fisher. News: Google boosts ACM's Turing Award prize to $1 million. *Communications of the ACM*, 58(1):31, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181631/fulltext.

Cusumano:2015:TSMa

[1599] Michael A. Cusumano. Technology strategy and management: How traditional firms must compete in the sharing economy. *Communications of the ACM*, 58(1):32–34, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181613/fulltext.

Bygrave:2015:LTR

[1600] Lee A. Bygrave. Law and technology: A right to be forgotten? *Communications of the ACM*, 58(1):35–37, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181632/fulltext.

Armour:2015:BSL

[1601] Phillip G. Armour. The business of software: A little queue theory. *Communications of the ACM*, 58(1):38–39, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181615/fulltext.

Haigh:2015:HRT

[1602] Thomas Haigh. Historical reflections: The tears of Donald Knuth. *Communications of the ACM*, 58(1):40–44, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/181633/fulltext`.

Rawassizadeh:2015:VWA

[1603] Reza Rawassizadeh, Blaine A. Price, and Marian Petre. Viewpoint: Wearables: has the age of smartwatches finally arrived? *Communications of the ACM*, 58(1):45–47, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/181635/fulltext`.

Maurer:2015:VDI

[1604] Hermann Maurer. Viewpoint: Does the Internet make us stupid? *Communications of the ACM*, 58(1):48–51, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/181634/fulltext`.

Micali:2015:VWI

[1605] Silvio Micali. Viewpoint: What it means to receive the Turing award. *Communications of the ACM*, 58 (1):52–53, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/181611/fulltext`.

Richardson:2015:DD

[1606] Rick Richardson. Disambiguating databases. *Communications of the ACM*, 58(1):54–61, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/181618/fulltext`.

Sampemane:2015:IAC

[1607] Geetanjali Sampemane. Internal access controls. *Communications of the ACM*, 58(1):62–65, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/181620/fulltext`.

Bueso:2015:STP

[1608] Davidlohr Bueso. Scalability techniques for practical synchronization primitives. *Communications of the ACM*, 58(1):66–74, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/181619/fulltext`.

Singh:2015:AWR

[1609] Virender Singh, Alicia Perdigones, José Luis Garcia, Ignacio Cañas-Guerroro, and Fernando R. Mazarrón. Analyzing worldwide research in hardware architecture, 1997–2011. *Communications of the ACM*, 58(1):76–85, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/181622/fulltext`.

Ruotsalo:2015:IIM

[1610] Tuukka Ruotsalo, Giulio Jacucci, Petri Myllymäki, and Samuel Kaski. Interactive intent modeling: information discovery beyond search. *Communications of the ACM*, 58(1):86–92, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181621/fulltext.

Navlakha:2015:DIP

[1611] Saket Navlakha and Ziv Bar-Joseph. Distributed information processing in biological and computational systems. *Communications of the ACM*, 58(1):94–102, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181614/fulltext.

Nair:2015:BDN

[1612] Ravi Nair. Big data needs approximate computing: technical perspective. *Communications of the ACM*, 58(1):104, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181623/fulltext.

Esmaeilzadeh:2015:NAG

[1613] Hadi Esmaeilzadeh, Adrian Sampson, Luis Ceze, and Doug Burger. Neural acceleration for general-purpose approximate programs. *Communications of the ACM*, 58(1):105–115, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181624/fulltext.

Bainbridge:2015:LBFa

[1614] William Sims Bainbridge. Last byte: Future tense: Wow! *Communications of the ACM*, 58(1):128–ff, January 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/181616/fulltext.

Vardi:2015:ELI

[1615] Moshe Y. Vardi. Editor's letter: Is information technology destroying the middle class? *Communications of the ACM*, 58(2):5, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/2/182648/fulltext.

Cerf:2015:CTN

[1616] Vinton G. Cerf. Cerf's up: There is nothing new under the sun. *Communications of the ACM*, 58(2):7, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/2/182649/fulltext.

Staff:2015:LES

[1617] CACM Staff. Letters to the Editor: Software engineering, like electrical engineering. *Communications of the ACM*, 58(2):8–9, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/2/182652/fulltext.

Guzdial:2015:BWB

[1618] Mark Guzdial. BLOG@CACM: What's the best way to teach computer science to beginners? *Communications of the ACM*, 58(2):12–13, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/2/182637/fulltext`.

Savage:2015:NVS

[1619] Neil Savage. News: Visualizing sound. *Communications of the ACM*, 58(2):15–17, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/2/182639/fulltext`.

Kugler:2015:NOP

[1620] Logan Kugler. News: Online privacy: regional differences. *Communications of the ACM*, 58(2):18–20, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/2/182638/fulltext`.

Kirkpatrick:2015:NUT

[1621] Keith Kirkpatrick. News: Using technology to help people. *Communications of the ACM*, 58(2):21–23, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/2/182640/fulltext`.

Landwehr:2015:PSW

[1622] Carl Landwehr. Privacy and security: We need a building code for building code. *Communications of the ACM*, 58(2):24–26, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/2/182641/fulltext`.

Zeng:2015:EBD

[1623] Ming Zeng. Economic and business dimensions: Three paradoxes of building platforms. *Communications of the ACM*, 58(2):27–29, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/2/182646/fulltext`.

Neumann:2015:IRF

[1624] Peter G. Neumann. Inside risks: Far-sighted thinking about deleterious computer-related events. *Communications of the ACM*, 58(2):30–33, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/2/182644/fulltext`.

Franklin:2015:EPC

[1625] Diana Franklin. Education: Putting the computer science in computing education research. *Communications of the ACM*, 58(2):34–36, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/2/182647/fulltext`.

Neville-Neil:2015:KVT

[1626] George V. Neville-Neil. Kode vicious: Too big to fail. *Communications of the ACM*, 58(2):37–39, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/2/182653/fulltext.

Fox:2015:VDI

[1627] Armando Fox and David Patterson. Viewpoint: Do-it-yourself textbook publishing. *Communications of the ACM*, 58(2):40–43, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/2/182651/fulltext.

Livshits:2015:VDS

[1628] Benjamin Livshits, Manu Sridharan, Yannis Smaragdakis, Ondrej Lhoták, J. Nelson Amaral, Bor-Yuh Evan Chang, Samuel Z. Guyer, Uday P. Khedker, Anders Møller, and Dimitrios Vardoulakis. Viewpoint: In defense of soundiness: a manifesto. *Communications of the ACM*, 58(2):44–46, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/2/182650/fulltext.

Stenn:2015:SNT

[1629] Harlan Stenn. Securing Network Time Protocol. *Communications of the ACM*, 58(2):48–51, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/2/182654/fulltext.

Binder:2015:MBT

[1630] Robert V. Binder, Bruno Legeard, and Anne Kramer. Model-based testing: where does it stand? *Communications of the ACM*, 58(2):52–56, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/2/182655/fulltext.

Juiz:2015:GIG

[1631] Carlos Juiz and Mark Toomey. To govern IT, or not to govern IT? *Communications of the ACM*, 58(2):58–64, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/2/182656/fulltext.

Alrajeh:2015:ASD

[1632] Dalal Alrajeh, Jeff Kramer, Alessandra Russo, and Sebastian Uchitel. Automated support for diagnosis and repair. *Communications of the ACM*, 58(2):65–72, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/2/182635/fulltext.

Walfish:2015:VCR

[1633] Michael Walfish and Andrew J. Blumberg. Verifying computations without reexecuting them. *Communications of the ACM*, 58(2):74–84, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/2/182636/fulltext.

Henzinger:2015:EPF

[1634] Thomas A. Henzinger and Jean-François Raskin. The equivalence problem for finite automata: technical perspective. *Communications of the ACM*, 58(2):86, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/2/182643/fulltext`.

Bonchi:2015:HNI

[1635] Filippo Bonchi and Damien Pous. Hacking nondeterminism with induction and coinduction. *Communications of the ACM*, 58(2):87–95, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/2/182642/fulltext`.

Shasha:2015:LBUaa

[1636] Dennis Shasha. Last byte: Upstart puzzles: Take your seats. *Communications of the ACM*, 58(2):104, February 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/2/182645/fulltext`.

Graves:2015:RAD

[1637] Wayne Graves. Raising ACM's Digital Library. *Communications of the ACM*, 58(3):5, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/3/183596/fulltext`.

Staff:2015:LEMa

[1638] CACM Staff. Letters to the Editor: Make abstracts communicate results. *Communications of the ACM*, 58(3):6, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/3/183601/fulltext`.

Cerf:2015:LEW

[1639] Vinton G. Cerf. Letters to the Editor: 'as we may think'. *Communications of the ACM*, 58(3):7, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/3/183597/fulltext`.

Barr:2015:BAT

[1640] Valerie Barr and Mark Guzdial. BLOG@CACM: Advice on teaching CS, and the learnability of programming languages. *Communications of the ACM*, 58(3):8–9, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/3/183602/fulltext`.

Kirkpatrick:2015:NAO

[1641] Keith Kirkpatrick. News: Automating organic synthesis. *Communications of the ACM*, 58(3):13–15, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/3/183590/fulltext`.

Geller:2015:NCT

[1642] Tom Geller. News: Car talk. *Communications of the ACM*, 58(3):16–18, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183589/fulltext.

Shein:2015:NPB

[1643] Esther Shein. News: Python for beginners. *Communications of the ACM*, 58(3):19–21, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183588/fulltext.

Samuelson:2015:LSC

[1644] Pamela Samuelson. Legally speaking: Copyrightability of Java APIs revisited. *Communications of the ACM*, 58(3):22–24, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183591/fulltext.

Cortina:2015:BPR

[1645] Thomas J. Cortina. Broadening participation: Reaching a broader population of students through "unplugged" activities. *Communications of the ACM*, 58(3):25–27, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183598/fulltext.

Denning:2015:PIT

[1646] Peter J. Denning and Edward E. Gordon. The profession of IT: A technician shortage. *Communications of the ACM*, 58(3):28–30, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183603/fulltext.

King:2015:CEH

[1647] John Leslie King. Computing ethics: Humans in computing: growing responsibilities for researchers. *Communications of the ACM*, 58(3):31–33, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183599/fulltext.

Krishnamurthi:2015:VRS

[1648] Shriram Krishnamurthi and Jan Vitek. Viewpoint: The real software crisis: repeatability as a core value. *Communications of the ACM*, 58(3):34–36, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183593/fulltext.

Bullynck:2015:VWD

[1649] Maarten Bullynck, Edgar G. Daylight, and Liesbeth De Mol. Viewpoint: Why did computer science make a hero out of Turing? *Communications of the ACM*, 58(3):37–39, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183592/fulltext.

Kamp:2015:HIP

[1650] Poul-Henning Kamp. HTTP/ 2.0: the IETF is phoning it in. *Communications of the ACM*, 58(3):40–42, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183605/fulltext.

Long:2015:MID

[1651] Dave Long. META II: digital vellum in the digital scriptorium. *Communications of the ACM*, 58(3):43–48, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183604/fulltext.

Andriole:2015:WOI

[1652] Stephen J. Andriole. Who owns IT? *Communications of the ACM*, 58(3):50–57, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183594/fulltext.

Machanavajjhala:2015:DSP

[1653] Ashwin Machanavajjhala and Daniel Kifer. Designing statistical privacy for your data. *Communications of the ACM*, 58(3):58–67, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183595/fulltext.

Libert:2015:PIH

[1654] Timothy Libert. Privacy implications of health information seeking on the web. *Communications of the ACM*, 58(3):68–77, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183606/fulltext.

Adelson:2015:IPG

[1655] Edward Adelson. Image processing goes back to basics: technical perspective. *Communications of the ACM*, 58(3):80, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183607/fulltext.

Paris:2015:LLF

[1656] Sylvain Paris, Samuel W. Hasinoff, and Jan Kautz. Local Laplacian filters: edge-aware image processing with a Laplacian pyramid. *Communications of the ACM*, 58(3):81–91, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183587/fulltext.

Hoffmann:2015:LBO

[1657] Leah Hoffmann. Last byte: Object lessons: Q&A. *Communications of the ACM*, 58(3):96–ff, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/3/183600/fulltext.

Konstan:2015:CFS

[1658] Joseph A. Konstan and Jack W. Davidson. Charting the future: scholarly publishing in CS. *Communications of the ACM*, 58(4):5, April 2015. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184706/fulltext.

Cerf:2015:HT

[1659] Vinton G. Cerf. The human touch. *Communications of the ACM*, 58(4): 7, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184707/fulltext.

Staff:2015:LEH

[1660] CACM Staff. Letters to the Editor: Human or machine? *Communications of the ACM*, 58(4):8–9, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184688/fulltext.

Langford:2015:BAR

[1661] John Langford and Mark Guzdial. BLOG@CACM: The arbitrariness of reviews, and advice for school administrators. *Communications of the ACM*, 58(4):12–13, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184698/fulltext.

Wright:2015:NMM

[1662] Alex Wright. News: Molecular moonshots. *Communications of the ACM*, 58(4):15–17, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184703/fulltext.

Edwards:2015:NSS

[1663] Chris Edwards. News: Secure-system designers strive to stem data leaks. *Communications of the ACM*, 58(4): 18–20, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184704/fulltext.

Broderick:2015:NWP

[1664] Mark Broderick. News: What's the price now? *Communications of the ACM*, 58(4):21–23, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184702/fulltext.

Denning:2015:PST

[1665] Dorothy E. Denning. Privacy and security: Toward more secure software. *Communications of the ACM*, 58(4):24–26, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184693/fulltext.

Sako:2015:TSM

[1666] Mari Sako. Technology strategy and management: Competing in emerging markets. *Communications of the ACM*, 58(4):27–29, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184699/fulltext.

Neville-Neil:2015:KVR

[1667] George V. Neville-Neil. Kode vicious: Raw networking. *Commu-*

nications of the ACM, 58(4):30–32, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184689/fulltext.

Shustek:2015:IIJ

[1668] Len Shustek. Interview: An interview with Juris Hartmanis. *Communications of the ACM*, 58(4):33–37, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184690/fulltext.

Lamport:2015:VWB

[1669] Leslie Lamport. Viewpoint: Who builds a house without drawing blueprints? *Communications of the ACM*, 58(4):38–41, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184705/fulltext.

Vixie:2015:GSG

[1670] Paul Vixie. Go static or go home. *Communications of the ACM*, 58(4):42–45, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184694/fulltext.

Gunther:2015:HSS

[1671] Neil J. Gunther, Paul Puglia, and Kristofer Tomasette. Hadoop superlinear scalability. *Communications of the ACM*, 58(4):46–55, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184695/fulltext.

Cohen:2015:STP

[1672] Philip R. Cohen, Edward C. Kaiser, M. Cecelia Buchanan, Scott Lind, Michael J. Corrigan, and R. Matthews Wesson. Sketch-Thru-Plan: a multimodal interface for command and control. *Communications of the ACM*, 58(4):56–65, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184700/fulltext.

Newcombe:2015:HAW

[1673] Chris Newcombe, Tim Rath, Fan Zhang, Bogdan Munteanu, Marc Brooker, and Michael Deardeuff. How Amazon web services uses formal methods. *Communications of the ACM*, 58(4):66–73, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184701/fulltext.

Sametinger:2015:SCM

[1674] Johannes Sametinger, Jerzy Rozenblit, Roman Lysecky, and Peter Ott. Security challenges for medical devices. *Communications of the ACM*, 58(4):74–82, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/4/184691/fulltext.

Mudge:2015:STC

[1675] Trevor Mudge. The specialization trend in computer hardware: technical perspective. *Communications of the*

ACM, 58(4):84, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/4/184696/fulltext`.

Qadeer:2015:CEB

[1676] Wajahat Qadeer, Rehan Hameed, Ofer Shacham, Preethi Venkatesan, Christos Kozyrakis, and Mark Horowitz. Convolution engine: balancing efficiency and flexibility in specialized computing. *Communications of the ACM*, 58(4):85–93, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/4/184697/fulltext`.

Batchelor:2015:LBF

[1677] David Allen Batchelor. Last byte: Future tense. *Communications of the ACM*, 58(4):96–ff, April 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/4/184692/fulltext`.

Vardi:2015:IQI

[1678] Moshe Y. Vardi. Incentivizing quality and impact in computing research. *Communications of the ACM*, 58(5): 5, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/5/186027/fulltext`.

Cerf:2015:CF

[1679] Vinton G. Cerf. Cascade failure. *Communications of the ACM*, 58(5): 7, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/5/186028/fulltext`.

Staff:2015:LEAb

[1680] CACM Staff. Letters to the Editor: Abolish software warranty disclaimers. *Communications of the ACM*, 58(5):8–9, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/5/186016/fulltext`.

Adams:2015:BIY

[1681] Joel Adams and Daniel A. Reed. BLOG@CACM: Introducing young women to CS, and supporting advanced research environments. *Communications of the ACM*, 58(5):10–11, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/5/186021/fulltext`.

Kugler:2015:NGE

[1682] Logan Kugler. News: Is "good enough" computing good enough? *Communications of the ACM*, 58(5):12–14, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/5/186012/fulltext`.

Kirkpatrick:2015:NPD

[1683] Keith Kirkpatrick. News: Putting the data science into journalism. *Communications of the ACM*, 58(5):15–17, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.`

acm.org/magazines/2015/5/186011/fulltext.

Mone:2015:NRH

[1684] Gregory Mone. News: Robots with a human touch. *Communications of the ACM*, 58(5):18–19, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186013/fulltext.

Schrage:2015:EBD

[1685] Michael Schrage and Marshall Van Alstyne. Economic and business dimensions: Life of IP. *Communications of the ACM*, 58(5):20–23, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186009/fulltext.

Fincher:2015:EWW

[1686] Sally Fincher. Education: What are we doing when we teach computing in schools? *Communications of the ACM*, 58(5):24–26, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186022/fulltext.

Sprigman:2015:LTO

[1687] Christopher Jon Sprigman. Law and technology: Oracle v. Google: a high-stakes legal fight for the software industry. *Communications of the ACM*, 58(5):27–29, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186017/fulltext.

Ball:2015:VTF

[1688] Thomas Ball and Benjamin Zorn. Viewpoint: Teach foundational language principles. *Communications of the ACM*, 58(5):30–31, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186023/fulltext.

Abiteboul:2015:VMY

[1689] Serge Abiteboul, Benjamin André, and Daniel Kaplan. Viewpoint: Managing your digital life. *Communications of the ACM*, 58(5):32–35, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186024/fulltext.

Sheehy:2015:TNN

[1690] Justin Sheehy. There is no now. *Communications of the ACM*, 58(5):36–41, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186019/fulltext.

Rathbun:2015:PPP

[1691] Spencer Rathbun. Parallel processing with promises. *Communications of the ACM*, 58(5):42–47, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186018/fulltext.

Preibusch:2015:PBA

[1692] Sören Preibusch. Privacy behaviors after Snowden. *Communications of the*

ACM, 58(5):48–55, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186025/fulltext.

Varma:2015:DFC

[1693] Roli Varma and Deepak Kapur. Decoding femininity in computer science in India. *Communications of the ACM*, 58(5):56–62, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186026/fulltext.

Laumond:2015:OMS

[1694] Jean-Paul Laumond, Nicolas Mansard, and Jean Bernard Lasserre. Optimization as motion selection principle in robot action. *Communications of the ACM*, 58(5):64–74, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186020/fulltext.

Larus:2015:PMC

[1695] James Larus. Programming multicore computers: technical perspective. *Communications of the ACM*, 58(5):76, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186014/fulltext.

Satish:2015:CTP

[1696] Nadathur Satish, Changkyu Kim, Jatin Chhugani, Hideki Saito, Rakesh Krishnaiyer, Mikhail Smelyanskiy, Milind Girkar, and Pradeep Dubey. Can traditional programming bridge the ninja performance gap for parallel computing applications? *Communications of the ACM*, 58(5):77–86, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186015/fulltext.

Shasha:2015:LBUb

[1697] Dennis Shasha. Last byte: Upstart puzzles: Strategic friendship. *Communications of the ACM*, 58(5):88, May 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/5/186010/fulltext.

White:2015:TY

[1698] John White. Thank you.... *Communications of the ACM*, 58(6):5, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187331/fulltext.

Cerf:2015:CA

[1699] Vinton G. Cerf. A celebration of accomplishments. *Communications of the ACM*, 58(6):7, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187330/fulltext.

Staff:2015:LEL

[1700] CACM Staff. Letters to the Editor: To learn CS principles, start in the cafeteria line. *Communications of the ACM*, 58(6):8–9, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187327/fulltext.

Guzdial:2015:BBE

[1701] Mark Guzdial. BLOG@CACM: Bringing evidence-based education to CS. *Communications of the ACM*, 58(6): 10–11, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187313/fulltext.

Savage:2015:NPP

[1702] Neil Savage. News: Plenty of proteins. *Communications of the ACM*, 58(6):12–14, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187318/fulltext.

Greengard:2015:NBL

[1703] Samuel Greengard. News: Between the lines. *Communications of the ACM*, 58(6):15–17, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187321/fulltext.

Anthes:2015:NEM

[1704] Gary Anthes. News: Estonia: a model for e-government. *Communications of the ACM*, 58(6):18–20, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187320/fulltext.

Reuter:2015:NKT

[1705] Andreas Reuter. News: Klaus Tschira: 1940–2015. *Communications of the ACM*, 58(6):21, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187317/fulltext.

Savage:2015:NFR

[1706] Neil Savage. News: Forging relationships. *Communications of the ACM*, 58(6):22–23, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187319/fulltext.

Misra:2015:IRR

[1707] Vishal Misra. Inside risks: Routing money, not packets. *Communications of the ACM*, 58(6):24–27, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187325/fulltext.

Denning:2015:PIE

[1708] Peter J. Denning. The profession of IT: Emergent innovation. *Communications of the ACM*, 58(6):28–31, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187322/fulltext.

Neville-Neil:2015:KVL

[1709] George V. Neville-Neil. Kode vicious: Lazarus code. *Communications of the ACM*, 58(6):32–33, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/6/187314/fulltext.

Jones:2015:VFM

[1710] Meg Leta Jones. Viewpoint: Forgetting made (too) easy. *Communications of the ACM*, 58(6):34–35, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187309/fulltext`.

Papakonstantinou:2015:VCC

[1711] Yannis Papakonstantinou. Viewpoint: Created computed universe. *Communications of the ACM*, 58(6):36–38, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187308/fulltext`.

Cerf:2015:IIU

[1712] Vinton G. Cerf. Interview: An interview with U.S. chief technology officer Megan Smith. *Communications of the ACM*, 58(6):39–43, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187315/fulltext`.

Matsudaira:2015:SMD

[1713] Kate Matsudaira. The science of managing data science. *Communications of the ACM*, 58(6):44–47, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187328/fulltext`.

Davidovic:2015:RCA

[1714] Stepán Davidovic and Kavita Guliani. Reliable Cron across the planet. *Communications of the ACM*, 58(6):48–53, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187329/fulltext`.

Zafarani:2015:EGT

[1715] Reza Zafarani and Huan Liu. Evaluation without ground truth in social media research. *Communications of the ACM*, 58(6):54–60, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187323/fulltext`.

Jensen:2015:CPN

[1716] Kurt Jensen and Lars M. Kristensen. Colored Petri nets: a graphical language for formal modeling and validation of concurrent systems. *Communications of the ACM*, 58(6):61–70, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187324/fulltext`.

Lamport:2015:TLC

[1717] Leslie Lamport. Turing lecture: The computer science of concurrency: the early years. *Communications of the ACM*, 58(6):71–76, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187316/fulltext`.

Berman:2015:FIE

[1718] Mark Berman, Piet Demeester, Jae Woo Lee, Kiran Nagaraja, Michael Zink, Didier Colle, Dilip Kumar Krishnappa, Dipankar Raychaudhuri, Henning Schulzrinne, Ivan Seskar, and Sachin Sharma. Future Internets escape the simulator. *Communications of the ACM*, 58(6):78–89, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187310/fulltext`.

Baudisch:2015:VRY

[1719] Patrick Baudisch. Virtual reality in your living room: technical perspective. *Communications of the ACM*, 58(6):92, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187311/fulltext`.

Jones:2015:IIE

[1720] Brett R. Jones, Hrvoje Benko, Eyal Ofek, and Andrew D. Wilson. IllumiRoom: immersive experiences beyond the TV screen. *Communications of the ACM*, 58(6):93–100, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187312/fulltext`.

Hoffmann:2015:LBQa

[1721] Leah Hoffmann. Last byte: Q&A: The path to clean data. *Communications of the ACM*, 58(6):104–ff, June 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/6/187326/fulltext`.

Wolf:2015:NCE

[1722] Alexander L. Wolf. A new Chief Executive Officer and Executive Director of ACM. *Communications of the ACM*, 58(7):4–5, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/7/188751/fulltext`.

Cerf:2015:CM

[1723] Vinton G. Cerf. Cerf's up: Milestones. *Communications of the ACM*, 58(7):7, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/7/188752/fulltext`.

Staff:2015:LEQ

[1724] CACM Staff. Letters to the Editor: Quality vs. quantity in faculty publications. *Communications of the ACM*, 58(7):8–9, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/7/188734/fulltext`.

Arquilla:2015:BDM

[1725] John Arquilla and Duncan A. Buell. BLOG@CACM: The dangers of military robots, the risks of online voting. *Communications of the ACM*, 58(7):12–13, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/7/188740/fulltext`.

Edwards:2015:NGP

[1726] Chris Edwards. News: Growing pains for deep learning. *Com-*

munications of the ACM, 58(7):14–16, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188737/fulltext.

Goth:2015:NBB

[1727] Gregory Goth. News: Bringing big data to the big tent. *Communications of the ACM*, 58(7):17–19, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188736/fulltext.

Mone:2015:NNS

[1728] Gregory Mone. News: The new smart cities. *Communications of the ACM*, 58(7):20–21, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188741/fulltext.

Fisher:2015:NAA

[1729] Lawrence M. Fisher. News: ACM announces 2014 award recipients. *Communications of the ACM*, 58(7):22–23, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188742/fulltext.

Samuelson:2015:LSA

[1730] Pamela Samuelson. Legally speaking: Anti-circumvention rules limit reverse engineering. *Communications of the ACM*, 58(7):24–26, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188738/fulltext.

Camp:2015:CER

[1731] L. Jean Camp. Computing ethics: Respecting people and respecting privacy. *Communications of the ACM*, 58(7):27–28, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188730/fulltext.

Anderson:2015:HRP

[1732] David Anderson. Historical reflections: Preserving the digital record of computing history. *Communications of the ACM*, 58(7):29–31, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188739/fulltext.

Armour:2015:BSU

[1733] Phillip G. Armour. The business of software: An updated software almanac. *Communications of the ACM*, 58(7):32–34, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188735/fulltext.

Gilbert:2015:BPA

[1734] Juan E. Gilbert, Jerlando F. L. Jackson, Edward C. Dillon, Jr., and LaVar J. Charleston. Broadening participation: African Americans in the U.S. computing sciences workforce. *Communications of the ACM*, 58(7):35–38, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http:

//cacm.acm.org/magazines/2015/7/188749/fulltext.

Kumar:2015:VFC

[1735] Vijay Kumar and Thomas A. Kalil. Viewpoint: The future of computer science and engineering is in your hands. *Communications of the ACM*, 58(7):39–41, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188750/fulltext.

Brook:2015:LLD

[1736] Andrew Brook. Low-latency distributed applications in finance. *Communications of the ACM*, 58(7):42–50, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188744/fulltext.

Dowling:2015:UFO

[1737] Phelim Dowling and Kevin McGrath. Using free and open source tools to manage software quality. *Communications of the ACM*, 58(7):51–55, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188743/fulltext.

Reed:2015:ECB

[1738] Daniel A. Reed and Jack Dongarra. Exascale computing and big data. *Communications of the ACM*, 58(7):56–68, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188732/fulltext.

Hogenboom:2015:URS

[1739] Alexander Hogenboom, Flavius Frasincar, Franciska de Jong, and Uzay Kaymak. Using rhetorical structure in sentiment analysis. *Communications of the ACM*, 58(7):69–77, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188733/fulltext.

Bonneau:2015:PEI

[1740] Joseph Bonneau, Cormac Herley, Paul C. van Oorschot, and Frank Stajano. Passwords and the evolution of imperfect authentication. *Communications of the ACM*, 58(7):78–87, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188731/fulltext.

Russell:2015:ULP

[1741] Stuart Russell. Unifying logic and probability. *Communications of the ACM*, 58(7):88–97, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188745/fulltext.

Clinger:2015:SCE

[1742] William D. Clinger. The simplicity of cache efficient functional algorithms: technical perspective. *Communications of the ACM*, 58(7):100, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188747/fulltext.

Blelloch:2015:CEF

[1743] Guy E. Blelloch and Robert Harper. Cache efficient functional algorithms. *Communications of the ACM*, 58 (7):101–108, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188746/fulltext.

Clegg:2015:LBF

[1744] Brian Clegg. Last byte: Future tense: Toy box Earth. *Communications of the ACM*, 58(7):112–ff, July 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/7/188748/fulltext.

Vardi:2015:WDA

[1745] Moshe Y. Vardi. Editor's letter: Why doesn't ACM have a SIG for theoretical computer science? *Communications of the ACM*, 58(8):5, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189832/fulltext.

Cerf:2015:CI

[1746] Vinton G. Cerf. Cerf's up: Invention. *Communications of the ACM*, 58(8): 7, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189833/fulltext.

Staff:2015:LEE

[1747] CACM Staff. Letters to the Editor: Not so easy to forget. *Communications of the ACM*, 58(8):8–9, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189839/fulltext.

Guzdial:2015:BPT

[1748] Mark Guzdial. BLOG@CACM: Plain talk on computing education. *Communications of the ACM*, 58(8):10–11, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189848/fulltext.

Shein:2015:NTC

[1749] Esther Shein. News: Teaching computers with illusions. *Communications of the ACM*, 58(8):13–15, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189835/fulltext.

Kugler:2015:NTV

[1750] Logan Kugler. News: Touching the virtual. *Communications of the ACM*, 58(8):16–18, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189834/fulltext.

Kirkpatrick:2015:NMC

[1751] Keith Kirkpatrick. News: The moral challenges of driverless cars. *Communications of the ACM*, 58(8):19–20, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189836/fulltext.

Kotz:2015:PSS

[1752] David Kotz, Kevin Fu, Carl Gunter, and Avi Rubin. Privacy and security: Security for mobile and cloud frontiers in healthcare. *Communications of the ACM*, 58(8):21–23, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189840/fulltext.

Chesbrough:2015:EBD

[1753] Henry Chesbrough and Marshall Van Alstyne. Economic and business dimensions: Permissionless innovation. *Communications of the ACM*, 58(8):24–26, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189837/fulltext.

Neville-Neil:2015:KVH

[1754] George V. Neville-Neil. Kode vicious: Hickory dickory doc. *Communications of the ACM*, 58(8):27–28, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189849/fulltext.

Hambrusch:2015:EUU

[1755] Susanne Hambrusch, Ran Libeskind-Hadas, and Eric Aaron. Education: Understanding the U.S. domestic computer science Ph.D. pipeline. *Communications of the ACM*, 58(8):29–32, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189841/fulltext.

Soh:2015:VLT

[1756] Leen-Kiat Soh, Duane F. Shell, Elizabeth Ingraham, Stephen Ramsay, and Brian Moore. Viewpoint: Learning through computational creativity. *Communications of the ACM*, 58(8):33–35, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189850/fulltext.

vanDeursen:2015:TWA

[1757] Arie van Deursen. Testing web applications with state objects. *Communications of the ACM*, 58(8):36–43, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189845/fulltext.

Wang:2015:EW

[1758] Daniel C. Wang. From the EDVAC to WEBVACs. *Communications of the ACM*, 58(8):44–51, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189844/fulltext.

Valiron:2015:PQF

[1759] Benoît Valiron, Neil J. Ross, Peter Selinger, D. Scott Alexander, and Jonathan M. Smith. Programming the quantum future. *Communications of the ACM*, 58(8):52–61, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317

(electronic). URL http://cacm.acm.org/magazines/2015/8/189851/fulltext.

Bayerl:2015:SFI

[1760] Petra Saskia Bayerl and Babak Akhgar. Surveillance and falsification implications for open source intelligence investigations. *Communications of the ACM*, 58(8):62–69, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189852/fulltext.

Tsaih:2015:CDC

[1761] Rua-Huan Tsaih, David C. Yen, and Yu-Chien Chang. Challenges deploying complex technologies in a traditional organization. *Communications of the ACM*, 58(8):70–75, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189843/fulltext.

Tiropanis:2015:NSW

[1762] Thanassis Tiropanis, Wendy Hall, Jon Crowcroft, Noshir Contractor, and Leandros Tassiulas. Network science, web science, and Internet science. *Communications of the ACM*, 58(8):76–82, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189846/fulltext.

Kittur:2015:CCP

[1763] Aniket (Niki) Kittur. Corralling crowd power: technical perspective. *Communications of the ACM*, 58(8):84, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189842/fulltext.

Bernstein:2015:SWP

[1764] Michael S. Bernstein, Greg Little, Robert C. Miller, Björn Hartmann, Mark S. Ackerman, David R. Karger, David Crowell, and Katrina Panovich. Soylent: a word processor with a crowd inside. *Communications of the ACM*, 58(8):85–94, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189847/fulltext.

Shasha:2015:LBUc

[1765] Dennis Shasha. Last byte: Upstart puzzles. *Communications of the ACM*, 58(8):96, August 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/8/189838/fulltext.

Konstan:2015:SCM

[1766] Joseph A. Konstan and Jack W. Davidson. Should conferences meet journals and where? A proposal for 'PACM'. *Communications of the ACM*, 58(9):5, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191173/fulltext.

Cerf:2015:CCA

[1767] Vinton G. Cerf. Cerf's up: On (computing) artifacts. *Communications of the ACM*, 58(9):7, September 2015. CODEN CACMA2.

ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191172/fulltext.

Staff:2015:LEMb

[1768] CACM Staff. Letters to the Editor: May the computational force be with you. *Communications of the ACM*, 58(9):8–9, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191180/fulltext.

Arquilla:2015:BMB

[1769] John Arquilla. BLOG@CACM: Moving beyond the cold war. *Communications of the ACM*, 58(9):10–11, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191181/fulltext.

Savage:2015:NSS

[1770] Neil Savage. News: Split second. *Communications of the ACM*, 58(9):12–14, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191175/fulltext.

Mone:2015:NSE

[1771] Gregory Mone. News: Sensing emotions. *Communications of the ACM*, 58(9):15–16, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191178/fulltext.

Kugler:2015:NNN

[1772] Logan Kugler. News: New news aggregator apps. *Communications of the ACM*, 58(9):17–19, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191174/fulltext.

Haigh:2015:HRI

[1773] Thomas Haigh and Mark Priestley. Historical reflections: Innovators assemble: Ada Lovelace, Walter Isaacson, and the superheroines of computing. *Communications of the ACM*, 58(9):20–27, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191176/fulltext.

Karaganis:2015:LTR

[1774] Joe Karaganis and Jennifer Urban. Law and technology: The rise of the robo notice. *Communications of the ACM*, 58(9):28–30, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191182/fulltext.

Kleine:2015:GCV

[1775] Dorothea Kleine. Global computing: The value of social theories for global computing. *Communications of the ACM*, 58(9):31–33, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191168/fulltext.

Denning:2015:PIA

[1776] Peter J. Denning. The profession of IT: Automated education and the professional. *Communications of the ACM*, 58(9):34–36, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191189/fulltext.

Ullman:2015:VER

[1777] Jeffrey D. Ullman. Viewpoint: Experiments as research validation: have we gone too far? *Communications of the ACM*, 58(9):37–39, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191183/fulltext.

Mitzenmacher:2015:VTE

[1778] Michael Mitzenmacher. Viewpoint: Theory without experiments: have we gone too far? *Communications of the ACM*, 58(9):40–42, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191184/fulltext.

McKinley:2015:PCP

[1779] Kathryn S. McKinley. Point/counterpoint: The pros and cons of the 'PACM' proposal: point. *Communications of the ACM*, 58(9):43–44, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191177/fulltext.

Rosenblum:2015:PCP

[1780] David S. Rosenblum. Point/counterpoint: The pros and cons of the 'PACM' proposal: counterpoint. *Communications of the ACM*, 58(9):44–45, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191179/fulltext.

Green:2015:NLT

[1781] Spence Green, Jeffrey Heer, and Christopher D. Manning. Natural language translation at the intersection of AI and HCI. *Communications of the ACM*, 58(9):46–53, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191190/fulltext.

Maddox:2015:TDS

[1782] Philip Maddox. Testing a distributed system. *Communications of the ACM*, 58(9):54–58, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191167/fulltext.

Sethumadhavan:2015:THU

[1783] Simha Sethumadhavan, Adam Waksman, Matthew Suozzo, Yipeng Huang, and Julianna Eum. Trustworthy hardware from untrusted components. *Communications of the ACM*, 58(9):60–71, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191186/fulltext.

Laguna:2015:DHP

[1784] Ignacio Laguna, Dong H. Ahn, Bronis R. de Supinski, Todd Gamblin, Gregory L. Lee, Martin Schulz, Saurabh Bagchi, Milind Kulkarni, Bowen Zhou, Zhezhe Chen, and Feng Qin. Debugging high-performance computing applications at massive scales. *Communications of the ACM*, 58(9):72–81, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191185/fulltext.

Chakraborty:2015:CSC

[1785] Tanmoy Chakraborty, Suhansanu Kumar, Pawan Goyal, Niloy Ganguly, and Animesh Mukherjee. On the categorization of scientific citation profiles in computer science. *Communications of the ACM*, 58(9):82–90, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191187/fulltext.

Davis:2015:CRC

[1786] Ernest Davis and Gary Marcus. Commonsense reasoning and commonsense knowledge in artificial intelligence. *Communications of the ACM*, 58(9): 92–103, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191169/fulltext.

Zohar:2015:BUH

[1787] Aviv Zohar. Bitcoin: under the hood. *Communications of the ACM*, 58(9): 104–113, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191170/fulltext.

Alexa:2015:WEF

[1788] Marc Alexa. A woodworker's easy fix: technical perspective. *Communications of the ACM*, 58(9):115, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191188/fulltext.

Umentani:2015:GEP

[1789] Nobuyuki Umentani, Takeo Igarashi, and Niloy J. Mitra. Guided exploration of physically valid shapes for furniture design. *Communications of the ACM*, 58(9):116–124, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191166/fulltext.

Hoffmann:2015:LBQb

[1790] Leah Hoffmann. Last byte: Q&A: A passion for pairings. *Communications of the ACM*, 58(9):128–ff, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/9/191171/fulltext.

Vardi:2015:WCD

[1791] Moshe Y. Vardi. What can be done about gender diversity in computing?: a lot! *Communications of the ACM*, 58(10):5, October 2015. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192372/fulltext.

Cerf:2015:THL

[1792] Vinton G. Cerf. The Third Heidelberg Laureate Forum. *Communications of the ACM*, 58(10):7, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192373/fulltext.

Staff:2015:LEB

[1793] CACM Staff. Letters to the Editor: Ban 'naked' braces! *Communications of the ACM*, 58(10):10–11, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192375/fulltext.

Arquilla:2015:BMO

[1794] John Arquilla and Daniel A. Reed. BLOG@CACM: The morality of online war; the fates of data analytics, HPC. *Communications of the ACM*, 58(10):12–13, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192381/fulltext.

Anthes:2015:NSU

[1795] Gary Anthes. News: Scientists update views of light. *Communications of the ACM*, 58(10):15–17, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192377/fulltext.

Greengard:2015:NAS

[1796] Samuel Greengard. News: Automotive systems get smarter. *Communications of the ACM*, 58(10):18–20, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192378/fulltext.

Kirkpatrick:2015:NCP

[1797] Keith Kirkpatrick. News: Cyber policies on the rise. *Communications of the ACM*, 58(10):21–23, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192376/fulltext.

HaroldH:2015:IRK

[1798] Harold 'Hal' Abelson, Ross Anderson, Steven M. Bellovin, Josh Benaloh, Matt Blaze, Whitfield 'Whit' Diffie, John Gilmore, Matthew Green, Susan Landau, Peter G. Neumann, Ronald L. Rivest, Jeffrey I. Schiller, Bruce Schneier, Michael A. Specter, and Daniel J. Weitzner. Inside risks: Keys under doormats. *Communications of the ACM*, 58(10):24–26, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192382/fulltext.

Cusumano:2015:TSMb

[1799] Michael A. Cusumano. Technology strategy and management: In defense of IBM. *Communications of the ACM*, 58(10):27–28, October 2015. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192392/fulltext.

Neville-Neil:2015:KVS

[1800] George V. Neville-Neil. Kode vicious: Storming the cubicle. *Communications of the ACM*, 58(10): 29–31, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192383/fulltext.

Armour:2015:BST

[1801] Phillip G. Armour. The business of software: Thinking thoughts. *Communications of the ACM*, 58(10): 32–34, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192384/fulltext.

Misa:2015:HRC

[1802] Thomas J. Misa. Historical reflections: Computing is history. *Communications of the ACM*, 58(10): 35–37, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192393/fulltext.

Dietterich:2015:VRC

[1803] Thomas G. Dietterich and Eric J. Horvitz. Viewpoint: Rise of concerns about AI: reflections and directions. *Communications of the ACM*, 58(10):38–40, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192386/fulltext.

Compeau:2015:VLA

[1804] Phillip Compeau and Pavel A. Pevzner. Viewpoint: Life after MOOCs. *Communications of the ACM*, 58(10): 41–44, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192385/fulltext.

Pillai:2015:CC

[1805] T. S. Pillai, V. Chidambaram, R. Alagappan, S. Al-Kiswany, A. C. Arpaci-Dusseau, and R. H. Arpaci-Dusseau. Crash consistency. *Communications of the ACM*, 58(10): 46–51, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192379/fulltext.

Harris:2015:DBE

[1806] Rich Harris. Dismantling the barriers to entry. *Communications of the ACM*, 58(10):52–57, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192380/fulltext.

Feigenbaum:2015:SAI

[1807] Joan Feigenbaum and Bryan Ford. Seeking anonymity in an Internet panopticon. *Communications of the ACM*, 58(10):58–69, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/10/192387/fulltext.

Lago:2015:FSP

[1808] Patricia Lago, Sedef Akinli Koçak, Ivica Crnkovic, and Birgit Penzenstadler. Framing sustainability as a property of software quality. *Communications of the ACM*, 58(10): 70–78, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/10/192388/fulltext`.

Eskin:2015:DGI

[1809] Eleazar Eskin. Discovering genes involved in disease and the mystery of missing heritability. *Communications of the ACM*, 58(10): 80–87, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/10/192389/fulltext`.

Moler:2015:TPJ

[1810] Cleve Moler. Technical perspective: Not just a matrix laboratory anymore. *Communications of the ACM*, 58(10):90, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/10/192374/fulltext`.

Trefethen:2015:CNF

[1811] Lloyd N. Trefethen. Computing numerically with functions instead of numbers. *Communications of the ACM*, 58(10):91–97, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/10/192390/fulltext`.

Bainbridge:2015:LBFb

[1812] William Sims Bainbridge. Last byte: Future tense: Processional. *Communications of the ACM*, 58(10): 104–ff, October 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/10/192391/fulltext`.

Schnabel:2015:TAV

[1813] Bobby Schnabel. A tale of ACM visions. *Communications of the ACM*, 58(11):5, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/11/193344/fulltext`.

Cerf:2015:MT

[1814] Vinton G. Cerf. Memory with a twist. *Communications of the ACM*, 58(11):7, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/11/193345/fulltext`.

Staff:2015:LEWa

[1815] CACM Staff. Letters to the Editor: Who will read PACM? *Communications of the ACM*, 58(11): 8–9, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/11/193330/fulltext`.

Barr:2015:BHM

[1816] Valerie Barr and Michael Stonebraker. BLOG@CACM: How men can help women in CS; winning 'computing's Nobel prize'. *Communications of the ACM*, 58(11): 10–11, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193335/fulltext.

Wright:2015:NAA

[1817] Alex Wright. News: Algorithmic authors. *Communications of the ACM*, 58 (11):12–14, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193341/fulltext.

Shein:2015:NCP

[1818] Esther Shein. News: Companies proactively seek out internal threats. *Communications of the ACM*, 58(11): 15–17, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193338/fulltext.

Edwards:2015:NBS

[1819] Chris Edwards. News: Brain science helps computers separate speakers in a crowded room. *Communications of the ACM*, 58(11): 18–20, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193340/fulltext.

Staff:2015:NJH

[1820] CACM Staff. News: John H. Holland 1929–2015. *Communications of the ACM*, 58(11):21, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193339/fulltext.

Lipner:2015:PSS

[1821] Steven B. Lipner. Privacy and security: Security assurance. *Communications of the ACM*, 58(11): 24–26, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193336/fulltext.

Samuelson:2015:LSS

[1822] Pamela Samuelson. Legally speaking: Software patents are falling down. *Communications of the ACM*, 58(11): 27–29, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193337/fulltext.

Hydari:2015:EBD

[1823] Muhammad Zia Hydari, Rahul Telang, and William M. Marella. Economic and business dimensions: Electronic health records and patient safety. *Communications of the ACM*, 58(11): 30–32, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193342/fulltext.

Sengupta:2015:EPK

[1824] Pratim Sengupta, Amanda Dickes, Amy Voss Farris, Ashlyn Karan, David Martin, and Mason Wright. Education: Programming in K–12 science classrooms. *Communications of the ACM*, 58(11):33–35, November 2015. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193343/fulltext.

Shustek:2015:IIF

[1825] Len Shustek. Interview: An interview with Fred Brooks. *Communications of the ACM*, 58(11): 36–40, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193333/fulltext.

Calvo:2015:VWT

[1826] Rafael A. Calvo, Dorian Peters, and Sidney D'Mello. Viewpoints: When technologies manipulate our emotions. *Communications of the ACM*, 58(11): 41–42, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193334/fulltext.

Maurer:2015:FS

[1827] Ben Maurer. Fail at scale. *Communications of the ACM*, 58(11): 44–49, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193320/fulltext.

Mcmullen:2015:IPW

[1828] Tyler Mcmullen. It probably works. *Communications of the ACM*, 58(11): 50–54, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193321/fulltext.

Savage:2015:CW

[1829] Taylor Savage. Componentizing the web. *Communications of the ACM*, 58 (11):55–61, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193322/fulltext.

Shahaf:2015:IC

[1830] Dafna Shahaf, Carlos Guestrin, Eric Horvitz, and Jure Leskovec. Information cartography. *Communications of the ACM*, 58(11):62–73, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193323/fulltext.

Lee:2015:WPP

[1831] So-Hyun Lee and Hee-Woong Kim. Why people post benevolent and malicious comments online. *Communications of the ACM*, 58(11): 74–79, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193324/fulltext.

Xu:2015:HGI

[1832] Chenyan Xu, Yang Yu, and Chun-Keung Hoi. Hidden in-game intelligence in NBA players' tweets. *Communications of the ACM*, 58(11): 80–89, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/11/193325/fulltext.

Gulwani:2015:IPM

[1833] Sumit Gulwani, José Hernández-Orallo, Emanuel Kitzelmann, Stephen H. Muggleton, Ute Schmid, and Benjamin Zorn. Inductive programming meets the real world. *Communications of the ACM*, 58(11): 90–99, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/11/193326/fulltext`.

Durand:2015:TPP

[1834] Frédo Durand. Technical perspective: The path to light transport. *Communications of the ACM*, 58 (11):102, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/11/193328/fulltext`.

Jakob:2015:GTE

[1835] Wenzel Jakob and Steve Marschner. Geometric tools for exploring manifolds of light transport paths. *Communications of the ACM*, 58(11): 103–111, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/11/193332/fulltext`.

Varghese:2015:TPT

[1836] George Varghese. Technical perspective: Treating networks like programs. *Communications of the ACM*, 58(11):112, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/11/193327/fulltext`.

Dobrescu:2015:SDV

[1837] Mihai Dobrescu and Katerina Argyraki. Software dataplane verification. *Communications of the ACM*, 58(11): 113–121, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/11/193331/fulltext`.

Shasha:2015:LBUd

[1838] Dennis Shasha. Last byte: Upstart puzzles: Auction triplets. *Communications of the ACM*, 58(11): 136, November 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/11/193329/fulltext`.

Vardi:2015:LAW

[1839] Moshe Y. Vardi. On lethal autonomous weapons. *Communications of the ACM*, 58(12):5, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/12/194643/fulltext`.

Cerf:2015:AAA

[1840] Vinton G. Cerf. Advancing the ACM agenda. *Communications of the ACM*, 58(12):7, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/12/194644/fulltext`.

Staff:2015:LEWb

[1841] CACM Staff. Letters to the Editor: What about statistical relational learning? *Communications of the ACM*, 58(12):8–9, December 2015. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194617/fulltext.

Vardi:2015:BWD

[1842] Moshe Y. Vardi and Mark Guzdial. BLOG@CACM: What do we do when the jobs are gone, and why we must embrace active learning. *Communications of the ACM*, 58 (12):10–11, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194628/fulltext.

Monroe:2015:NWD

[1843] Don Monroe. News: When data is not enough. *Communications of the ACM*, 58(12):12–14, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194636/fulltext.

Mone:2015:NHI

[1844] Gregory Mone. News: The hyper-intelligent bandage. *Communications of the ACM*, 58(12):15–16, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194635/fulltext.

Kirkpatrick:2015:NTB

[1845] Keith Kirkpatrick. News: Technology brings online education in line with campus programs. *Communications of the ACM*, 58(12): 17–19, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194637/fulltext.

Anderson:2015:HRD

[1846] David Anderson. Historical reflections: The digital dark age. *Communications of the ACM*, 58(12): 20–23, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194621/fulltext.

Denning:2015:PIW

[1847] Peter J. Denning and Nicholas Dew. The profession of IT: Why our theories of innovation fail us. *Communications of the ACM*, 58(12): 24–26, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194629/fulltext.

Tuana:2015:CEC

[1848] Nancy Tuana. Computing ethics: Coupled ethical-epistemic analysis in teaching ethics. *Communications of the ACM*, 58(12):27–29, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194630/fulltext.

Neville-Neil:2015:KVP

[1849] George V. Neville-Neil. Kode vicious: Pickled patches. *Communications of the ACM*, 58(12): 30–32, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http:/

/cacm.acm.org/magazines/2015/12/194623/fulltext.

Ladner:2015:BPI

[1850] Richard E. Ladner and Sheryl Burgstahler. Broadening participation: Increasing the participation of individuals with disabilities in computing. *Communications of the ACM*, 58 (12):33–36, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194624/fulltext.

Scott:2015:VCN

[1851] Jeremy Scott and Alan Bundy. Viewpoint: Creating a new generation of computational thinkers. *Communications of the ACM*, 58(12): 37–40, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194638/fulltext.

Doctorow:2015:VCL

[1852] Cory Doctorow. Viewpoint: I can't let you do that, Dave. *Communications of the ACM*, 58(12): 41–42, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194639/fulltext.

Goose:2015:PCC

[1853] Stephen Goose. Point/counterpoint: The case for banning killer robots: point. *Communications of the ACM*, 58(12):43–45, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194631/fulltext.

Arkin:2015:PCC

[1854] Ronald Arkin. Point/counterpoint: The case for banning killer robots: counterpoint. *Communications of the ACM*, 58(12):46–47, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194632/fulltext.

Angiuli:2015:HIY

[1855] Olivia Angiuli, Joe Blitzstein, and Jim Waldo. How to de-identify your data. *Communications of the ACM*, 58 (12):48–55, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194640/fulltext.

Matsudaira:2015:LSD

[1856] Kate Matsudaira. Lean software development: building and shipping two versions. *Communications of the ACM*, 58(12):56–58, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194642/fulltext.

Gaud:2015:CMM

[1857] Fabien Gaud, Baptiste Lepers, Justin Funston, Mohammad Dashti, Alexandra Fedorova, Vivien Quéma, Renaud Lachaize, and Mark Roth. Challenges of memory management on modern NUMA systems. *Communications of the ACM*, 58(12): 59–66, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/12/194641/fulltext`.

Ballatore:2015:PM

[1858] Andrea Ballatore and Michela Bertolotto. Personalizing maps. *Communications of the ACM*, 58(12):68–74, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/12/194625/fulltext`.

Wadler:2015:PT

[1859] Philip Wadler. Propositions as types. *Communications of the ACM*, 58(12):75–84, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/12/194626/fulltext`.

Sen:2015:SDP

[1860] Soumya Sen, Carlee Joe-Wong, Sangtae Ha, and Mung Chiang. Smart data pricing: using economics to manage network congestion. *Communications of the ACM*, 58(12):86–93, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/12/194627/fulltext`.

Kraut:2015:IUP

[1861] Robert Kraut and Moira Burke. Internet use and psychological well-being: effects of activity and audience. *Communications of the ACM*, 58(12):94–100, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/12/194633/fulltext`.

Snavely:2015:TPP

[1862] Noah Snavely. Technical perspective: Paris beyond Frommer's. *Communications of the ACM*, 58(12):102, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/12/194620/fulltext`.

Doersch:2015:WMP

[1863] Carl Doersch, Saurabh Singh, Abhinav Gupta, Josef Sivic, and Alexei A. Efros. What makes Paris look like Paris? *Communications of the ACM*, 58(12):103–110, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/12/194622/fulltext`.

Maier:2015:TPS

[1864] David Maier. Technical perspective: In-situ database management. *Communications of the ACM*, 58(12):111, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/12/194618/fulltext`.

Alagiannis:2015:NEQ

[1865] Ioannis Alagiannis, Renata Borovica-Gajic, Miguel Branco, Stratos Idreos, and Anastasia Ailamaki. NoDB: efficient query execution on raw data files. *Communications of the ACM*, 58(12):112–121, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http:/`

/cacm.acm.org/magazines/2015/12/194619/fulltext.

Hoffmann:2015:LBQc

[1866] Leah Hoffmann. Last byte: Q&A: Redefining architectures. *Communications of the ACM*, 58(12): 136–ff, December 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/12/194634/fulltext.

Nelson:2016:FTN

[1867] Mark R. Nelson. Focusing on teacher needs in K–12 CS education. *Communications of the ACM*, 59(1):5, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195746/fulltext.

Cerf:2016:RLA

[1868] Vinton G. Cerf. On the road in Latin America. *Communications of the ACM*, 59(1):7, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195745/fulltext.

Staff:2016:LELa

[1869] CACM Staff. Letters to the Editor: Let the liable pay. *Communications of the ACM*, 59(1):8–9, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195719/fulltext.

Cerf:2016:LEA

[1870] Vinton G. Cerf. Letters to the Editor: ACM's 2016 general election. *Communications of the ACM*, 59(1):10, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195744/fulltext.

Wolf:2016:LEA

[1871] Alexander L. Wolf. Letters to the Editor: ACM's annual report for FY15. *Communications of the ACM*, 59(1):11–16, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195743/fulltext.

Arquilla:2016:BCC

[1872] John Arquilla and Joel C. Adams. BLOG@CACM: Controlling cyber arms, and creating new LEGOs. *Communications of the ACM*, 59(1):18–19, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195731/fulltext.

Savage:2016:NSM

[1873] Neil Savage. News: Seeing more clearly. *Communications of the ACM*, 59(1):20–22, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195740/fulltext.

Greengard:2016:NBM

[1874] Samuel Greengard. News: Better memory. *Communications of the ACM*, 59(1):23–25, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195739/fulltext.

Shein:2016:NPI

[1875] Esther Shein. News: Preserving the internet. *Communications of the ACM*, 59(1):26–28, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195738/fulltext.

Staff:2016:NGA

[1876] CACM Staff. News: Gene Amdahl, 1922–2015. *Communications of the ACM*, 59(1):29, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195741/fulltext.

Weinberg:2016:LTB

[1877] Jonathan T. Weinberg. Law and technology: Biometric identity. *Communications of the ACM*, 59(1):30–32, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195732/fulltext.

Cusumano:2016:TSMa

[1878] Michael A. Cusumano and David B. Yoffie. Technology strategy and management: Extrapolating from Moore's law. *Communications of the ACM*, 59(1):33–35, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195742/fulltext.

Armour:2016:BSC

[1879] Phillip G. Armour. The business of software: The chaos machine. *Communications of the ACM*, 59(1):36–38, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195733/fulltext.

Haigh:2016:HRW

[1880] Thomas Haigh and Mark Priestley. Historical reflections: Where code comes from: architectures of automatic control from Babbage to Algol. *Communications of the ACM*, 59(1):39–44, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195721/fulltext.

Wiederhold:2016:VUD

[1881] Gio Wiederhold. Viewpoint: Unbalanced data leads to obsolete economic advice. *Communications of the ACM*, 59(1):45–46, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195729/fulltext.

Shoham:2016:VWK

[1882] Yoav Shoham. Viewpoint: Why knowledge representation matters. *Communications of the ACM*, 59(1):47–49, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2015/1/195730/fulltext.

Neville-Neil:2016:TIL

[1883] George V. Neville-Neil. Time is an illusion lunchtime doubly so. *Communications of the ACM*, 59(1):50–55, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195723/fulltext`.

Nanavati:2016:NVS

[1884] Mihir Nanavati, Malte Schwarzkopf, Jake Wires, and Andrew Warfield. Non-volatile storage. *Communications of the ACM*, 59(1):56–63, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195724/fulltext`.

Helland:2016:ICE

[1885] Pat Helland. Immutability changes everything. *Communications of the ACM*, 59(1):64–70, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195722/fulltext`.

Shekhar:2016:SC

[1886] Shashi Shekhar, Steven K. Feiner, and Walid G. Aref. Spatial computing. *Communications of the ACM*, 59(1):72–81, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195727/fulltext`.

Lee:2016:ODC

[1887] Melissa Lee, Esteve Almirall, and Jonathan Wareham. Open data and civic apps: first-generation failures, second-generation improvements. *Communications of the ACM*, 59 (1):82–89, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195725/fulltext`.

Goutas:2016:BBC

[1888] Lazaros Goutas, Juliana Sutanto, and Hassan Aldarbesti. The building blocks of a cloud strategy: evidence from three SaaS providers. *Communications of the ACM*, 59(1):90–97, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195726/fulltext`.

Koutis:2016:AFF

[1889] Ioannis Koutis and Ryan Williams. Algebraic fingerprints for faster algorithms. *Communications of the ACM*, 59(1):98–105, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195728/fulltext`.

Hand:2016:TPH

[1890] Steve Hand. Technical perspective: High-performance virtualization: are we done? *Communications of the ACM*, 59(1):107, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195736/fulltext`.

Amit:2016:BMP

[1891] Nadav Amit, Abel Gordon, Nadav Har'El, Muli Ben-Yehuda, Alex Landau, Assaf Schuster, and Dan Tsafrir. Bare-metal performance for virtual machines with exitless interrupts. *Communications of the ACM*, 59(1):108–116, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195734/fulltext`.

Milo:2016:TPE

[1892] Tova Milo. Technical perspective: Enlisting the power of the crowd. *Communications of the ACM*, 59(1):117, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195735/fulltext`.

Trushkowsky:2016:AEQ

[1893] Beth Trushkowsky, Tim Kraska, Michael J. Franklin, and Purnamrita Sarkar. Answering enumeration queries with the crowd. *Communications of the ACM*, 59(1):118–127, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195737/fulltext`.

Shasha:2016:LBUa

[1894] Dennis Shasha. Last byte: Upstart puzzles: Ice trap. *Communications of the ACM*, 59(1):136, January 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2015/1/195720/fulltext`.

Vardi:2016:ELM

[1895] Moshe Y. Vardi. Editor's letter: The moral hazard of complexity-theoretic assumptions. *Communications of the ACM*, 59(2):5, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197412/fulltext`.

Cerf:2016:CAW

[1896] Vinton G. Cerf. Cerf's up: Apps and the Web. *Communications of the ACM*, 59(2):7, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197413/fulltext`.

Staff:2016:LEEa

[1897] CACM Staff. Letters to the Editor: Expect 'ungoverned actors' to use AI-supported weapons, too. *Communications of the ACM*, 59(2):8–9, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197433/fulltext`.

Guzdial:2016:BDS

[1898] Mark Guzdial. BLOG@CACM: Drumming up support for AP CS principles. *Communications of the ACM*, 59(2):12–13, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197430/fulltext`.

Edwards:2016:NSR

[1899] Chris Edwards. News: Self-repair techniques point to robots that design themselves. *Communications of the ACM*, 59(2):15–17, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/2/197416/fulltext.

Kugler:2016:NHS

[1900] Logan Kugler. News: How a supervillain (or a hacker in his basement) could destroy the Internet. *Communications of the ACM*, 59(2):18–20, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/2/197414/fulltext.

Geller:2016:NPL

[1901] Tom Geller. News: In privacy law, it's the U.S. vs. the world. *Communications of the ACM*, 59(2):21–23, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/2/197415/fulltext.

Staff:2016:NAI

[1902] CACM Staff. News: ACM inducts Fellows. *Communications of the ACM*, 59(2):24, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/2/197434/fulltext.

Evans:2016:EBD

[1903] Peter C. Evans and Rahul C. Basole. Economic and business dimensions: Revealing the API ecosystem and enterprise strategy via visual analytics. *Communications of the ACM*, 59(2):26–28, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/2/197409/fulltext.

Landwehr:2016:PSP

[1904] Carl Landwehr. Privacy and security: Privacy research directions. *Communications of the ACM*, 59(2):29–31, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/2/197410/fulltext.

Adrion:2016:EBA

[1905] Rick Adrion, Renee Fall, Barbara Ericson, and Mark Guzdial. Education: Broadening access to computing education state by state. *Communications of the ACM*, 59(2):32–34, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/2/197417/fulltext.

Neville-Neil:2016:KVCa

[1906] George V. Neville-Neil. Kode vicious: Code hoarding. *Communications of the ACM*, 59(2):35–36, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/2/197431/fulltext.

Chandra:2016:VLT

[1907] Satish Chandra, Suresh Thummalapenta, and Saurabh Sinha. Viewpoint:

Lessons from the tech transfer trenches. *Communications of the ACM*, 59(2): 37–39, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197419/fulltext`.

Lin:2016:VHC

[1908] Herbert Lin. Viewpoint: Having a conversation about bulk surveillance. *Communications of the ACM*, 59(2):40–42, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197418/fulltext`.

Guha:2016:SOE

[1909] R. V. Guha, Dan Brickley, and Steve Macbeth. Schema.org: evolution of structured data on the web. *Communications of the ACM*, 59(2):44–51, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197422/fulltext`.

McCaffrey:2016:VDS

[1910] Caitie McCaffrey. The verification of a distributed system. *Communications of the ACM*, 59(2):52–55, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197420/fulltext`.

Diakopoulos:2016:AAD

[1911] Nicholas Diakopoulos. Accountability in algorithmic decision making. *Communications of the ACM*, 59(2): 56–62, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197421/fulltext`.

Thomee:2016:YND

[1912] Bart Thomee, David A. Shamma, Gerald Friedland, Benjamin Elizalde, Karl Ni, Douglas Poland, Damian Borth, and Li-Jia Li. YFCC100M: the new data in multimedia research. *Communications of the ACM*, 59(2):64–73, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197425/fulltext`.

Stonebraker:2016:TLL

[1913] Michael Stonebraker. Turing Lecture: The land sharks are on the squawk box. *Communications of the ACM*, 59(2):74–83, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197423/fulltext`.

Shim:2016:PAT

[1914] J. P. Shim, J. Koh, S. Fister, and H. Y. Seo. Phonetic analytics technology and big data: real-world cases. *Communications of the ACM*, 59(2): 84–90, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197424/fulltext`.

Abadi:2016:BRD

[1915] Daniel Abadi, Rakesh Agrawal, Anastasia Ailamaki, Magdalena Balazinska, Philip A. Bernstein, Michael J. Carey, Surajit Chaudhuri, Jeffrey Dean, AnHai Doan, Michael J. Franklin, Johannes Gehrke, Laura M. Haas, Alon Y. Halevy, Joseph M. Hellerstein, Yannis E. Ioannidis, H. V. Jagadish, Donald Kossmann, Samuel Madden, Sharad Mehrotra, Tova Milo, Jeffrey F. Naughton, Raghu Ramakrishnan, Volker Markl, Christopher Olston, Beng Chin Ooi, Christopher Ré, Dan Suciu, Michael Stonebraker, Todd Walter, and Jennifer Widom. The Beckman report on database research. *Communications of the ACM*, 59(2):92–99, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197411/fulltext`.

Mitzenmacher:2016:TPC

[1916] Michael Mitzenmacher and Justin Thaler. Technical perspective: Catching lies (and mistakes) in offloaded computation. *Communications of the ACM*, 59(2):102, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197426/fulltext`.

Parno:2016:PNP

[1917] Bryan Parno, Jon Howell, Craig Gentry, and Mariana Raykova. Pinocchio: nearly practical verifiable computation. *Communications of the ACM*, 59(2):103–112, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197429/fulltext`.

Gulwani:2016:TPP

[1918] Sumit Gulwani. Technical perspective: Program synthesis using stochastic techniques. *Communications of the ACM*, 59(2):113, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197427/fulltext`.

Schkufza:2016:SPO

[1919] Eric Schkufza, Rahul Sharma, and Alex Aiken. Stochastic program optimization. *Communications of the ACM*, 59(2):114–122, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197428/fulltext`.

MacLeod:2016:LBFa

[1920] Ken MacLeod. Last byte: Future tense: Chatterbox. *Communications of the ACM*, 59(2):128–ff, February 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/2/197432/fulltext`.

Spafford:2016:SE

[1921] Eugene H. Spafford. The strength of encryption. *Communications of the ACM*, 59(3):5, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198867/fulltext`.

Cerf:2016:CSC

[1922] Vinton G. Cerf. Computer science in the curriculum. *Communications of the*

ACM, 59(3):7, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198866/fulltext`.

Staff:2016:LEAa

[1923] CACM Staff. Letters to the Editor: ACM moral imperatives vs. lethal autonomous weapons. *Communications of the ACM*, 59(3):8–9, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198861/fulltext`.

Barr:2016:BVA

[1924] Valerie Barr. BLOG@CACM: The value of Ada. *Communications of the ACM*, 59(3):10–11, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198868/fulltext`.

Goth:2016:NDS

[1925] Gregory Goth. News: Deep or shallow, NLP is breaking out. *Communications of the ACM*, 59(3):13–16, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198856/fulltext`.

Geller:2016:NRD

[1926] Tom Geller. News: Rich data, poor fields. *Communications of the ACM*, 59(3):17–18, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198857/fulltext`.

Savage:2016:NWC

[1927] Neil Savage. News: When computers stand in the schoolhouse door. *Communications of the ACM*, 59(3):19–21, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198859/fulltext`.

Staff:2016:NPN

[1928] CACM Staff. News: Peter Naur: 1928–2016. *Communications of the ACM*, 59(3):22–23, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198858/fulltext`.

Samuelson:2016:LSN

[1929] Pamela Samuelson. Legally speaking: New exemptions to anti-circumvention rules. *Communications of the ACM*, 59(3):24–26, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198862/fulltext`.

Johnson:2016:CEQ

[1930] Jeffrey Johnson. Computing ethics: The question of information justice. *Communications of the ACM*, 59(3):27–29, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198869/fulltext`.

Denning:2016:PIF

[1931] Peter J. Denning. The profession of IT: Fifty years of operating systems. *Communications of the ACM*, 59(3):30–32, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198870/fulltext`.

Barnes:2016:BPN

[1932] Tiffany Barnes and George K. Thiruvathukal. Broadening participation: The need for research in broadening participation. *Communications of the ACM*, 59(3):33–34, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198863/fulltext`.

Vukovic:2016:VRT

[1933] Maja Vukovic, Jim Laredo, Vinod Muthusamy, Aleksander Slominski, Roman Vaculin, Wei Tan, Vijay Naik, Ignacio Silva-Lepe, Arun Kumar, Biplav Srivastava, and Joel W. Branch. Viewpoint: Riding and thriving on the API hype cycle. *Communications of the ACM*, 59(3):35–37, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198864/fulltext`.

Jagadish:2016:VPP

[1934] H. V. Jagadish. Viewpoint: Paper presentation at conferences: time for a reset. *Communications of the ACM*, 59(3):38–39, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198865/fulltext`.

Patterson:2016:IIS

[1935] David Patterson. Interview: An interview with Stanford University President John Hennessy. *Communications of the ACM*, 59(3):40–45, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198871/fulltext`.

Staff:2016:PBG

[1936] CACM Staff. A purpose-built global network: Google's move to SDN. *Communications of the ACM*, 59(3):46–54, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198853/fulltext`.

Matsudaira:2016:PAR

[1937] Kate Matsudaira. The paradox of autonomy and recognition. *Communications of the ACM*, 59(3):55–57, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198854/fulltext`.

Limoncelli:2016:ASL

[1938] Tom Limoncelli. Automation should be like Iron Man, not Ultron. *Communications of the ACM*, 59(3):58–61, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198852/fulltext`.

Collberg:2016:RCS

[1939] Christian Collberg and Todd A. Proebsting. Repeatability in computer systems research. *Communications of the ACM*, 59(3):62–69, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198873/fulltext`.

Tanenbaum:2016:LLY

[1940] Andrew S. Tanenbaum. Lessons learned from 30 years of MINIX. *Communications of the ACM*, 59(3):70–78, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198874/fulltext`.

DeNicola:2016:LMR

[1941] Antonio De Nicola and Michele Missikoff. A lightweight methodology for rapid ontology engineering. *Communications of the ACM*, 59(3):79–86, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198872/fulltext`.

Barak:2016:HFS

[1942] Boaz Barak. Hopes, fears, and software obfuscation. *Communications of the ACM*, 59(3):88–96, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198855/fulltext`.

Regehr:2016:TPS

[1943] John Regehr. Technical perspective: STACKing up undefined behaviors. *Communications of the ACM*, 59(3): 98, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198850/fulltext`.

Wang:2016:DAU

[1944] Xi Wang, Nickolai Zeldovich, M. Frans Kaashoek, and Armando Solar-Lezama. A differential approach to undefined behavior detection. *Communications of the ACM*, 59(3):99–106, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198849/fulltext`.

Forsyth:2016:TPT

[1945] David Forsyth. Technical perspective: Taming the name game. *Communications of the ACM*, 59(3):107, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198875/fulltext`.

Ordonez:2016:LNO

[1946] Vicente Ordonez, Wei Liu, Jia Deng, Yejin Choi, Alexander C. Berg, and Tamara L. Berg. Learning to name objects. *Communications of the ACM*, 59(3):108–115, March 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/3/198851/fulltext`.

Hoffmann:2016:LBQa

[1947] Leah Hoffmann. Last byte: Q&A: A graphics and hypertext innovator. *Communications of the ACM*, 59(3):120–ff, March 2016. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/3/198860/fulltext.

Vardi:2016:WHT

[1948] Moshe Y. Vardi. Are we headed toward another global tech bust? *Communications of the ACM*, 59(4): 5, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200176/fulltext.

Cerf:2016:EED

[1949] Vinton G. Cerf and Maggie Johnson. Enrollments explode! but diversity students are leaving.... *Communications of the ACM*, 59(4):7, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200177/fulltext.

Staff:2016:LEC

[1950] CACM Staff. Letters to the Editor: Chaos is no catastrophe. *Communications of the ACM*, 59(4):8–9, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200162/fulltext.

Guzdial:2016:BSB

[1951] Mark Guzdial and John Arquilla. BLOG@CACM: Sampling bias in CS education, and where's the cyber strategy? *Communications of the ACM*, 59(4):10–11, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200154/fulltext.

Edwards:2016:NAP

[1952] Chris Edwards. News: Automating proofs. *Communications of the ACM*, 59(4):13–15, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200157/fulltext.

Kirkpatrick:2016:NET

[1953] Keith Kirkpatrick. News: Existing technologies can assist the disabled. *Communications of the ACM*, 59(4):16–18, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200156/fulltext.

Anthes:2016:NSE

[1954] Gary Anthes. News: Search engine agendas. *Communications of the ACM*, 59(4):19–21, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200159/fulltext.

Fisher:2016:NMM

[1955] Lawrence M. Fisher. News: Marvin Minsky: 1927–2016. *Communications of the ACM*, 59(4):22–24, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200158/fulltext.

Fisher:2016:NDA

[1956] Lawrence M. Fisher. News: A decade of ACM efforts contribute to computer science for all. *Communications of the ACM*, 59(4):25–27, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200155/fulltext.

Toyama:2016:GCI

[1957] Kentaro Toyama. Global computing: The Internet and inequality. *Communications of the ACM*, 59(4):28–30, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200163/fulltext.

Neville-Neil:2016:KVG

[1958] George V. Neville-Neil. Kode vicious: GNL is not Linux. *Communications of the ACM*, 59(4):31–32, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200171/fulltext.

Sako:2016:TSM

[1959] Mari Sako. Technology strategy and management: The need for corporate diplomacy. *Communications of the ACM*, 59(4):33–35, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200164/fulltext.

Cebrian:2016:VBV

[1960] Manuel Cebrian, Iyad Rahwan, and Alex “Sandy” Pentland. Viewpoint: Beyond viral. *Communications of the ACM*, 59(4):36–39, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200165/fulltext.

Kamp:2016:MEM

[1961] Poul-Henning Kamp. More encryption means less privacy. *Communications of the ACM*, 59(4):40–42, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200167/fulltext.

Baquero:2016:WLC

[1962] Carlos Baquero and Nuno Preguiça. Why logical clocks are easy. *Communications of the ACM*, 59(4):43–47, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200168/fulltext.

Limoncelli:2016:HSD

[1963] Thomas A. Limoncelli. How SysAdmins devalue themselves. *Communications of the ACM*, 59(4):48–49, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200166/fulltext.

Bera:2016:HCB

[1964] Palash Bera. How colors in business dashboards affect users’ decision making. *Communications of the ACM*, 59(4):50–57, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http:

//cacm.acm.org/magazines/2016/4/200170/fulltext.

Gofman:2016:MBE

[1965] Mikhail I. Gofman and Sinjini Mitra. Multimodal biometrics for enhanced mobile device security. *Communications of the ACM*, 59(4):58–65, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200169/fulltext.

Apostolico:2016:YST

[1966] Alberto Apostolico, Maxime Crochemore, Martin Farach-Colton, Zvi Galil, and S. Muthukrishnan. 40 years of suffix trees. *Communications of the ACM*, 59(4):66–73, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200160/fulltext.

Wagner:2016:TPF

[1967] David Wagner. Technical perspective: Fairness and the coin flip. *Communications of the ACM*, 59(4):75, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200173/fulltext.

Andrychowicz:2016:SMC

[1968] Marcin Andrychowicz, Stefan Dziembowski, Daniel Malinowski, and Lukasz Mazurek. Secure multiparty computations on Bitcoin. *Communications of the ACM*, 59(4):76–84, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200175/fulltext.

Sirer:2016:TPS

[1969] Emin Gün Sirer. Technical perspective: The state (and security) of the Bitcoin economy. *Communications of the ACM*, 59(4):85, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200172/fulltext.

Meiklejohn:2016:FBC

[1970] Sarah Meiklejohn, Marjori Pomarole, Grant Jordan, Kirill Levchenko, Damon McCoy, Geoffrey M. Voelker, and Stefan Savage. A fistful of Bitcoins: characterizing payments among men with no names. *Communications of the ACM*, 59(4):86–93, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200174/fulltext.

Shasha:2016:LBUb

[1971] Dennis Shasha. Last byte: Upstart puzzles: Sleep no more. *Communications of the ACM*, 59(4):96, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/4/200161/fulltext.

Vardi:2016:MIA

[1972] Moshe Y. Vardi. The moral imperative of artificial intelligence. *Communications of the ACM*, 59(5):5, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317

(electronic). URL http://cacm.acm.org/magazines/2016/5/201608/fulltext.

Cerf:2016:IT

[1973] Vinton G. Cerf. The IANA transition. *Communications of the ACM*, 59 (5):7, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201609/fulltext.

Staff:2016:LEW

[1974] CACM Staff. Letters to the Editor: Why All Writs is a Trojan horse. *Communications of the ACM*, 59(5): 8–9, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201586/fulltext.

Staff:2016:LEAb

[1975] CACM Staff. Letters to the Editor: ACM's 2016 general election: please take this opportunity to vote. *Communications of the ACM*, 59(5):11–22, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201610/fulltext.

Guzdial:2016:BBC

[1976] Mark Guzdial. BLOG@CACM: Bringing computer science to U.S. schools, state by state. *Communications of the ACM*, 59(5):24–25, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201587/fulltext.

Monroe:2016:NSP

[1977] Don Monroe. News: Silicon photonics: ready to go the distance? *Communications of the ACM*, 59(5):26–28, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201588/fulltext.

Greengard:2016:NCG

[1978] Samuel Greengard. News: Cybersecurity gets smart. *Communications of the ACM*, 59(5):29–31, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201590/fulltext.

Kirkpatrick:2016:NCS

[1979] Keith Kirkpatrick. News: Coding as sport. *Communications of the ACM*, 59(5):32–33, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201589/fulltext.

Schultz:2016:LTI

[1980] Jason Schultz. Law and technology: The Internet of Things we don't own? *Communications of the ACM*, 59(5):36–38, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201606/fulltext.

Shapiro:2016:EBB

[1981] R. Benjamin Shapiro and Matthew Ahrens. Education: Beyond blocks: syntax and semantics. *Communications of the ACM*, 59(5):39–41, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201600/fulltext.

Wen:2016:EBD

[1982] Wen Wen and Chris Forman. Economic and business dimensions: Do patent commons and standards-setting organizations help navigate patent thickets? *Communications of the ACM*, 59(5):42–43, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201607/fulltext.

Anderson:2016:HRP

[1983] David P. Anderson. Historical reflections: Preserving hybrid objects. *Communications of the ACM*, 59(5):44–46, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201601/fulltext.

Wendzel:2016:VHI

[1984] Steffen Wendzel. Viewpoint: How to increase the security of smart buildings? *Communications of the ACM*, 59(5):47–49, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201602/fulltext.

Burns:2016:BOK

[1985] Brendan Burns, Brian Grant, David Oppenheimer, Eric Brewer, and John Wilkes. Borg, Omega, and Kubernetes. *Communications of the ACM*, 59(5):50–57, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201605/fulltext.

Matsudaira:2016:DA

[1986] Kate Matsudaira. Delegation as art. *Communications of the ACM*, 59(5):58–60, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201603/fulltext.

Jacobson:2016:UC

[1987] Ivar Jacobson, Ian Spence, and Brian Kerr. Use-case 2.0. *Communications of the ACM*, 59(5):61–69, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201604/fulltext.

Casner:2016:CPA

[1988] Stephen M. Casner, Edwin L. Hutchins, and Don Norman. The challenges of partially automated driving. *Communications of the ACM*, 59(5):70–77, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201592/fulltext.

Lenharth:2016:PGA

[1989] Andrew Lenharth, Donald Nguyen, and Keshav Pingali. Parallel graph analytics. *Communications of the ACM*, 59(5):78–87, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/5/201591/fulltext.

Samet:2016:SPC

[1990] Hanan Samet, Sarana Nutanong, and Brendan C. Fruin. Static presentation consistency issues in smartphone mapping apps. *Communications of the ACM*, 59(5):88–98, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/5/201593/fulltext`.

Bretan:2016:SRM

[1991] Mason Bretan and Gil Weinberg. A survey of robotic musicianship. *Communications of the ACM*, 59(5):100–109, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/5/201594/fulltext`.

Barak:2016:TPB

[1992] Boaz Barak. Technical perspective: a breakthrough in software obfuscation. *Communications of the ACM*, 59(5):112, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/5/201598/fulltext`.

Garg:2016:HSS

[1993] Sanjam Garg, Craig Gentry, Shai Halevi, Mariana Raykova, Amit Sahai, and Brent Waters. Hiding secrets in software: a cryptographic approach to program obfuscation. *Communications of the ACM*, 59(5):113–120, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/5/201597/fulltext`.

Murphy:2016:TPS

[1994] Gail C. Murphy. Technical perspective: Software is natural. *Communications of the ACM*, 59(5):121, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/5/201596/fulltext`.

Hindle:2016:NS

[1995] Abram Hindle, Earl T. Barr, Mark Gabel, Zhendong Su, and Premkumar Devanbu. On the naturalness of software. *Communications of the ACM*, 59(5):122–131, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/5/201595/fulltext`.

Friedman:2016:LBF

[1996] Louis Friedman. Last byte: Future tense: Becoming a multi-planet species. *Communications of the ACM*, 59(5):136–ff, May 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/5/201599/fulltext`.

Wolf:2016:MF

[1997] Alexander L. Wolf. Moving forward. *Communications of the ACM*, 59(6):5, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202658/fulltext`.

Cerf:2016:C

[1998] Vinton G. Cerf. Celebrations! *Communications of the ACM*, 59(6):7, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202659/fulltext`.

Staff:2016:LEN

[1999] CACM Staff. Letters to the Editor: No backdoor required or expected. *Communications of the ACM*, 59(6): 8–9, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202652/fulltext`.

Langford:2016:BSA

[2000] John Langford, Bertrand Meyer, and Mark Guzdial. BLOG@CACM: The solution to AI, what real researchers do, and expectations for CS classrooms. *Communications of the ACM*, 59(6):10–11, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202660/fulltext`.

Savage:2016:NKP

[2001] Neil Savage. News: The key to privacy. *Communications of the ACM*, 59(6):12–14, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202654/fulltext`.

Kugler:2016:NWH

[2002] Logan Kugler. News: What happens when big data blunders? *Communications of the ACM*, 59(6):15–16, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202655/fulltext`.

Wright:2016:NRS

[2003] Alex Wright. News: Reimagining search. *Communications of the ACM*, 59(6):17–19, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202656/fulltext`.

Mone:2016:NWN

[2004] Gregory Mone. News: What's next for digital humanities? *Communications of the ACM*, 59(6):20–21, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202653/fulltext`.

Mercuri:2016:IRR

[2005] Rebecca T. Mercuri and Peter G. Neumann. Inside risks: The risks of self-auditing systems. *Communications of the ACM*, 59(6):22–25, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202662/fulltext`.

Neville-Neil:2016:KVW

[2006] George V. Neville-Neil. Kode vicious: What are you trying to pull? *Communications of the ACM*, 59(6):26–27, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202657/fulltext`.

Denning:2016:PIH

[2007] Peter J. Denning. The profession of IT: How to produce innovations. *Communications of the ACM*, 59(6):28–30, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/6/202661/fulltext.

Chiou:2016:IIY

[2008] Derek Chiou. Interview: An interview with Yale Patt. *Communications of the ACM*, 59(6):31–36, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/6/202641/fulltext.

Barak:2016:VCS

[2009] Boaz Barak. Viewpoint: Computer science should stay young. *Communications of the ACM*, 59(6):37–38, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/6/202644/fulltext.

Hubaux:2016:VPD

[2010] Jean-Pierre Hubaux and Ari Juels. Viewpoint: Privacy is dead, long live privacy. *Communications of the ACM*, 59(6):39–41, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/6/202642/fulltext.

Mitra:2016:VBA

[2011] Ankita Mitra. Viewpoint: A byte is all we need. *Communications of the ACM*, 59(6):42–44, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/6/202643/fulltext.

Matsudaira:2016:NTD

[2012] Kate Matsudaira. Nine things I didn't know I would learn being an engineer manager. *Communications of the ACM*, 59(6):45–47, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/6/202663/fulltext.

Gregg:2016:FG

[2013] Brendan Gregg. The flame graph. *Communications of the ACM*, 59(6):48–57, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/6/202665/fulltext.

Helland:2016:SDS

[2014] Pat Helland. Standing on distributed shoulders of giants. *Communications of the ACM*, 59(6):58–61, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/6/202664/fulltext.

Myers:2016:IAU

[2015] Brad A. Myers and Jeffrey Stylos. Improving API usability. *Communications of the ACM*, 59(6):62–69, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/6/202645/fulltext.

Genkin:2016:PKE

[2016] Daniel Genkin, Lev Pachmanov, Itamar Pipman, Adi Shamir, and Eran Tromer. Physical key extraction attacks on PCs. *Communications of the ACM*, 59(6):70–79, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202646/fulltext`.

Drineas:2016:RRN

[2017] Petros Drineas and Michael W. Mahoney. RandNLA: randomized numerical linear algebra. *Communications of the ACM*, 59(6):80–90, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202647/fulltext`.

Sen:2016:VTP

[2018] Koushik Sen. Veritesting tackles path-explosion problem. *Communications of the ACM*, 59(6):92, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202651/fulltext`.

Avgerinos:2016:ESE

[2019] Thanassis Avgerinos, Alexandre Rebert, Sang Kil Cha, and David Brumley. Enhancing symbolic execution with veritesting. *Communications of the ACM*, 59(6):93–100, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202649/fulltext`.

Suri:2016:CC

[2020] Siddharth Suri. Computing with the crowd. *Communications of the ACM*, 59(6):101, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202650/fulltext`.

Barowy:2016:API

[2021] Daniel W. Barowy, Charlie Curtsinger, Emery D. Berger, and Andrew McGregor. AutoMan: a platform for integrating human-based and digital computation. *Communications of the ACM*, 59(6):102–109, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202648/fulltext`.

Hoffmann:2016:LBQb

[2022] Leah Hoffmann. Last byte: Q&A: Finding new directions in cryptography: Whitfield Diffie and Martin Hellman on their meeting, their research, and the results that billions use every day. *Communications of the ACM*, 59(6):112–ff, June 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/6/202666/fulltext`.

Vardi:2016:RAU

[2023] Moshe Y. Vardi. The ritual of academic-unit review. *Communications of the ACM*, 59(7):5, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/7/204033/fulltext`.

Cerf:2016:PBI

[2024] Vinton G. Cerf. The power of big ideas. *Communications of the ACM*, 59(7):7, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204034/fulltext.

Staff:2016:LERa

[2025] CACM Staff. Letters to the Editor: Rethinking computational thinking. *Communications of the ACM*, 59 (7):8, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204035/fulltext.

Wing:2016:BPC

[2026] Jeannette M. Wing and Dan Stanzione. BLOG@CACM: Progress in computational thinking, and expanding the HPC community. *Communications of the ACM*, 59(7):10–11, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204017/fulltext.

Savage:2016:NGM

[2027] Neil Savage. News: Graph matching in theory and practice. *Communications of the ACM*, 59(7):12–14, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204023/fulltext.

Krakovsky:2016:NAS

[2028] Marina Krakovsky. News: Accelerating search. *Communications of the ACM*, 59(7):15–16, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204024/fulltext.

Fisher:2016:NBE

[2029] Lawrence M. Fisher. News: Booming enrollments. *Communications of the ACM*, 59(7):17–18, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204026/fulltext.

Kirkpatrick:2016:NLA

[2030] Keith Kirkpatrick. News: Legal advice on the smartphone. *Communications of the ACM*, 59(7):19–21, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204022/fulltext.

Samuelson:2016:LSA

[2031] Pamela Samuelson. Legally speaking: Apple v. Samsung and the upcoming design patent wars? *Communications of the ACM*, 59(7):22–24, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204025/fulltext.

Haigh:2016:HRH

[2032] Thomas Haigh. Historical reflections: How Charles Bachman invented the DBMS, a foundation of our digital world. *Communications of the ACM*, 59(7):25–30, July 2016. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204036/fulltext.

Metcalf:2016:CEB

[2033] Jacob Metcalf. Computing ethics: Big data analytics and revision of the common rule. *Communications of the ACM*, 59(7):31–33, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204018/fulltext.

Walsh:2016:VTR

[2034] Toby Walsh. Viewpoint: Turing's red flag. *Communications of the ACM*, 59(7):34–37, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204019/fulltext.

Gurevich:2016:VIP

[2035] Yuri Gurevich, Efim Hudis, and Jeannette M. Wing. Viewpoint: Inverse privacy. *Communications of the ACM*, 59(7):38–42, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204020/fulltext.

Date:2016:SYU

[2036] Sachin Date. Should you upload or ship big data to the cloud? *Communications of the ACM*, 59(7):44–51, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204028/fulltext.

Limoncelli:2016:SBP

[2037] Thomas A. Limoncelli. The small batches principle. *Communications of the ACM*, 59(7):52–57, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204027/fulltext.

Hartmann:2016:SE

[2038] Heinrich Hartmann. Statistics for engineers. *Communications of the ACM*, 59(7):58–66, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204029/fulltext.

Roychoudhury:2016:FBS

[2039] Abhik Roychoudhury and Satish Chandra. Formula-based software debugging. *Communications of the ACM*, 59(7):68–77, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204030/fulltext.

Potvin:2016:WGS

[2040] Rachel Potvin and Josh Levenberg. Why Google stores billions of lines of code in a single repository. *Communications of the ACM*, 59(7):78–87, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/7/204032/fulltext.

Barequet:2016:ILB

[2041] Gill Barequet, Günter Rote, and Mira Shalah. $\lambda > 4$: an improved lower bound on the growth constant of polyominoes. *Communications of the ACM*, 59(7):88–95, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/7/204031/fulltext`.

Ferrara:2016:RSB

[2042] Emilio Ferrara, Onur Varol, Clayton Davis, Filippo Menczer, and Alessandro Flammini. The rise of social bots. *Communications of the ACM*, 59(7):96–104, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/7/204021/fulltext`.

Kautz:2016:TPC

[2043] Henry Kautz and Parag Singla. Technical perspective: Combining logic and probability. *Communications of the ACM*, 59(7):106, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/7/204014/fulltext`.

Gogate:2016:PTP

[2044] Vibhav Gogate and Pedro Domingos. Probabilistic theorem proving. *Communications of the ACM*, 59(7):107–115, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/7/204016/fulltext`.

Madden:2016:TPM

[2045] Sam Madden. Technical perspective: Mesa takes data warehousing to new heights. *Communications of the ACM*, 59(7):116, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/7/204015/fulltext`.

Gupta:2016:MGR

[2046] Ashish Gupta, Fan Yang, Jason Govig, Adam Kirsch, Kelvin Chan, Kevin Lai, Shuo Wu, Sandeep Dhoot, Abhilash Rajesh Kumar, Ankur Agiwal, Sanjay Bhansali, Mingsheng Hong, Jamie Cameron, Masood Siddiqi, David Jones, Jeff Shute, Andrey Gubarev, Shivakumar Venkataraman, and Divyakant Agrawal. Mesa: a geo-replicated online data warehouse for Google's advertising system. *Communications of the ACM*, 59(7):117–125, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/7/204037/fulltext`.

Shasha:2016:LBUc

[2047] Dennis Shasha. Last byte: Upstart puzzles: Chair games. *Communications of the ACM*, 59(7):128, July 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/7/204013/fulltext`.

Hanson:2016:NAP

[2048] Vicki L. Hanson. From the new ACM President. *Communications of the ACM*, 59(8):5, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/8/205038/fulltext`.

Cerf:2016:SSL

[2049] Vinton G. Cerf. Star struck in Lindau. *Communications of the ACM*, 59(8): 7, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205039/fulltext.

Staff:2016:LEF

[2050] CACM Staff. Letters to the Editor: Future cyberdefenses will defeat cyberattacks on PCs. *Communications of the ACM*, 59(8):8–9, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205034/fulltext.

Hong:2016:BIG

[2051] Jason Hong. BLOG@CACM: Inside the Great Wall. *Communications of the ACM*, 59(8):10–11, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205035/fulltext.

Krakovsky:2016:NRR

[2052] Marina Krakovsky. News: Reinforcement renaissance. *Communications of the ACM*, 59(8):12–14, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205048/fulltext.

Anthes:2016:NOS

[2053] Gary Anthes. News: Open source software no longer optional. *Communications of the ACM*, 59(8):15–17, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205050/fulltext.

Kugler:2016:NSA

[2054] Logan Kugler. News: Smartphone apps for social good. *Communications of the ACM*, 59(8):18–20, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205049/fulltext.

Kocher:2016:PSC

[2055] Paul Kocher. Privacy and security: Computer security is broken: can better hardware help fix it? *Communications of the ACM*, 59(8):22–25, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205036/fulltext.

Kafai:2016:ECT

[2056] Yasmin B. Kafai. Education: From computational thinking to computational participation in K–12 education. *Communications of the ACM*, 59(8):26–27, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205037/fulltext.

Neville-Neil:2016:KVCb

[2057] George V. Neville-Neil. Kode vicious: Chilling the messenger. *Communications of the ACM*, 59(8):28–29, August 2016. CODEN CACMA2.

ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205051/fulltext.

Shneiderman:2016:VTC

[2058] Ben Shneiderman. Viewpoint: Teamwork in computing research. *Communications of the ACM*, 59(8):30–31, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205053/fulltext.

Beschastnikh:2016:DDS

[2059] Ivan Beschastnikh, Patty Wang, Yuriy Brun, and Michael D. Ernst. Debugging distributed systems. *Communications of the ACM*, 59(8):32–37, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205044/fulltext.

Helland:2016:SSS

[2060] Pat Helland. The singular success of SQL. *Communications of the ACM*, 59(8):38–41, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205045/fulltext.

Killalea:2016:HDM

[2061] Tom Killalea. The hidden dividends of microservices. *Communications of the ACM*, 59(8):42–45, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205046/fulltext.

Khatoun:2016:SCC

[2062] Rida Khatoun and Sherali Zeadally. Smart cities: concepts, architectures, research opportunities. *Communications of the ACM*, 59(8):46–57, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205032/fulltext.

Forrest:2016:ACM

[2063] Stephanie Forrest and Melanie Mitchell. Adaptive computation: the multidisciplinary legacy of John H. Holland. *Communications of the ACM*, 59(8):58–63, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205047/fulltext.

Kappelman:2016:SSD

[2064] Leon Kappelman, Mary C. Jones, Vess Johnson, Ephraim R. McLean, and Kittipong Boonme. Skills for success at different stages of an IT professional's career. *Communications of the ACM*, 59(8):64–70, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205031/fulltext.

Berger:2016:CBC

[2065] Bonnie Berger, Noah M. Daniels, and Y. William Yu. Computational biology in the 21st century: scaling with compressive algorithms. *Communications of the ACM*, 59(8):72–80, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317

(electronic). URL http://cacm.acm.org/magazines/2016/8/205052/fulltext.

Millstein:2016:TPT

[2066] Todd Millstein. Technical perspective: Toward reliable programming for unreliable hardware. *Communications of the ACM*, 59(8):82, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205042/fulltext.

Carbin:2016:VQR

[2067] Michael Carbin, Sasa Misailovic, and Martin C. Rinard. Verifying quantitative reliability for programs that execute on unreliable hardware. *Communications of the ACM*, 59(8):83–91, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205040/fulltext.

Wadler:2016:TPW

[2068] Philip Wadler. Technical perspective: Why didn't I think of that? *Communications of the ACM*, 59(8):92, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205043/fulltext.

Chlipala:2016:UWS

[2069] Adam Chlipala. Ur/Web: a simple model for programming the web. *Communications of the ACM*, 59(8):93–100, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205041/fulltext.

MacLeod:2016:LBFb

[2070] Ken MacLeod. Last byte: Future tense: Gut feelings. *Communications of the ACM*, 59(8):104–ff, August 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/8/205033/fulltext.

Vardi:2016:ARC

[2071] Moshe Y. Vardi. Academic rankings considered harmful! *Communications of the ACM*, 59(9):5, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/9/206263/fulltext.

Cerf:2016:KIO

[2072] Vinton G. Cerf. Keeping the Internet open. *Communications of the ACM*, 59(9):7, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/9/206264/fulltext.

Staff:2016:LEEb

[2073] CACM Staff. Letters to the Editor: Election auditing and verifiability. *Communications of the ACM*, 59(9):8–9, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/9/206245/fulltext.

Edwards:2016:NRQ

[2074] Chris Edwards. News: Reconciling quantum physics with math. *Communications of the ACM*, 59(9):11–13, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206246/fulltext`.

Greengard:2016:NGR

[2075] Samuel Greengard. News: GPUs reshape computing. *Communications of the ACM*, 59(9):14–16, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206249/fulltext`.

Mone:2016:NEU

[2076] Gregory Mone. News: The edge of the uncanny. *Communications of the ACM*, 59(9):17–19, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206247/fulltext`.

Wu:2016:LTN

[2077] Felix Wu. Law and technology: No easy answers in the fight over iPhone decryption. *Communications of the ACM*, 59(9):20–22, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206250/fulltext`.

Denning:2016:PIS

[2078] Peter J. Denning. The profession of IT: Software quality. *Communications of the ACM*, 59(9):23–25, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206242/fulltext`.

Ladner:2016:BPA

[2079] Richard E. Ladner and Maya Israel. Broadening participation: "for all" in "computer science for all". *Communications of the ACM*, 59(9): 26–28, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206252/fulltext`.

Etzioni:2016:VDA

[2080] Amitai Etzioni and Oren Etzioni. Viewpoint: Designing AI systems that obey our laws and values. *Communications of the ACM*, 59(9):29–31, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206255/fulltext`.

Katz-Bassett:2016:VHC

[2081] Ethan Katz-Bassett, Justine Sherry, Te-Yuan Huang, Maria Kazandjieva, Craig Partridge, and Fahad Dogar. Viewpoint: Helping conference attendees better understand research presentations. *Communications of the ACM*, 59(9):32–34, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206256/fulltext`.

Bernstein:2016:VNL

[2082] Abraham Bernstein, James Hendler, and Natalya Noy. Viewpoint: A new look at the Semantic Web. *Communications of the ACM*, 59(9):35–37, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206254/fulltext`.

Bailis:2016:IRP

[2083] Peter Bailis, Simon Peter, and Justine Sherry. Introducing research for practice. *Communications of the ACM*, 59 (9):38–41, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206259/fulltext`.

Matsudaira:2016:BSA

[2084] Kate Matsudaira. Bad software architecture is a people problem. *Communications of the ACM*, 59(9):42–43, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206258/fulltext`.

Limoncelli:2016:OLS

[2085] Thomas A. Limoncelli. 10 optimizations on linear search. *Communications of the ACM*, 59(9):44–48, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206257/fulltext`.

Buneman:2016:WDC

[2086] Peter Buneman, Susan Davidson, and James Frew. Why data citation is a computational problem. *Communications of the ACM*, 59(9):50–57, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206243/fulltext`.

Samet:2016:DPC

[2087] Hanan Samet, Sarana Nutanong, and Brendan C. Fruin. Dynamic presentation consistency issues in smartphone mapping apps. *Communications of the ACM*, 59(9):58–67, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206244/fulltext`.

Liang:2016:LES

[2088] Percy Liang. Learning executable semantic parsers for natural language understanding. *Communications of the ACM*, 59(9):68–76, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206253/fulltext`.

Kutulakos:2016:DCL

[2089] Kyros Kutulakos. The dawn of computational light transport: technical perspective. *Communications of the ACM*, 59(9):78, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206262/fulltext`.

Velten:2016:IPL

[2090] Andreas Velten, Di Wu, Belen Masia, Adrian Jarabo, Christopher Barsi, Chinmaya Joshi, Everett Lawson, Moungi Bawendi, Diego Gutierrez, and Ramesh Raskar. Imaging the propagation of light through scenes at picosecond resolution. *Communications of the ACM*, 59(9):79–86, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206260/fulltext`.

Moore:2016:JRT

[2091] Andrew W. Moore. Jupiter rising: technical perspective. *Communications of the ACM*, 59(9):87, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206248/fulltext`.

Singh:2016:JRD

[2092] Arjun Singh, Joon Ong, Amit Agarwal, Glen Anderson, Ashby Armistead, Roy Bannon, Seb Boving, Gaurav Desai, Bob Felderman, Paulie Germano, Anand Kanagala, Hong Liu, Jeff Provost, Jason Simmons, Eiichi Tanda, Jim Wanderer, Urs Hölzle, Stephen Stuart, and Amin Vahdat. Jupiter rising: a decade of Clos topologies and centralized control in Google's datacenter network. *Communications of the ACM*, 59(9): 88–97, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206261/fulltext`.

Hoffmann:2016:LBQc

[2093] Leah Hoffmann. Last byte: Q&A. *Communications of the ACM*, 59(9): 104–ff, September 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/9/206251/fulltext`.

Boisvert:2016:DIR

[2094] Ronald F. Boisvert. Departments: Incentivizing reproducibility. *Communications of the ACM*, 59(10):5, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207757/fulltext`.

Cerf:2016:DWG

[2095] Vinton G. Cerf. Departments: 'we're going backward!'. *Communications of the ACM*, 59(10):7, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207755/fulltext`.

Cook:2016:BAA

[2096] Perry R. Cook. BLOG@CACM: Adding art to STEM. *Communications of the ACM*, 59(10): 8–9, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207756/fulltext`.

Monroe:2016:NOF

[2097] Don Monroe. News: Optical fibers getting full. *Communications of the ACM*, 59(10):10–12, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207758/fulltext`.

Krakovsky:2016:NBH

[2098] Marina Krakovsky. News: Bringing holography to light. *Com-*

munications of the ACM, 59(10): 13–15, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/10/207760/fulltext.

Kirkpatrick:2016:NBA

[2099] Keith Kirkpatrick. News: Battling algorithmic bias: how do we ensure algorithms treat us fairly? *Communications of the ACM*, 59 (10):16–17, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/10/207759/fulltext.

Cusumano:2016:TSMb

[2100] Michael A. Cusumano. Technology strategy and management: The puzzle of Japanese innovation and entrepreneurship. *Communications of the ACM*, 59(10): 18–20, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/10/207761/fulltext.

Best:2016:GCM

[2101] Michael L. Best. Global computing: Mobile computing and political transformation. *Communications of the ACM*, 59(10): 21–23, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/10/207767/fulltext.

Neville-Neil:2016:KVCc

[2102] George V. Neville-Neil. Kode vicious: Cloud calipers. *Communications of the ACM*, 59(10): 24–25, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/10/207768/fulltext.

Neumann:2016:IRR

[2103] Peter G. Neumann. Inside risks: Risks of automation: a cautionary total-system perspective of our cyberfuture. *Communications of the ACM*, 59(10):26–30, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/10/207769/fulltext.

Conrad:2016:VUC

[2104] Kathrin Conrad, Nysret Musliu, Reinhard Pichler, and Hannes Werthner. Viewpoint: Universities and computer science in the European crisis of refugees. *Communications of the ACM*, 59(10):31–33, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/10/207762/fulltext.

Degenbaev:2016:ITG

[2105] Ulan Degenbaev, Jochen Eisinger, Manfred Ernst, Ross Mcilroy, and Hannes Payer. Idle-time garbage-collection scheduling. *Communications of the ACM*, 59(10):34–39, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/10/207771/fulltext.

Matsudaira:2016:FS

[2106] Kate Matsudaira. Fresh starts. *Communications of the ACM*, 59

(10):40–41, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207770/fulltext`.

Medeiros:2016:DCW

[2107] Andre Medeiros. Dynamics of change: why reactivity matters. *Communications of the ACM*, 59(10): 42–46, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207772/fulltext`.

Lychev:2016:RSI

[2108] Robert Lychev, Michael Schapira, and Sharon Goldberg. Rethinking security for Internet routing. *Communications of the ACM*, 59(10): 48–57, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207763/fulltext`.

Partridge:2016:ECN

[2109] Craig Partridge and Mark Allman. Ethical considerations in network measurement papers. *Communications of the ACM*, 59(10): 58–64, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207765/fulltext`.

Burns:2016:BCM

[2110] A. J. Burns, M. Eric Johnson, and Peter Honeyman. A brief chronology of medical device security. *Communications of the ACM*, 59(10): 66–72, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207766/fulltext`.

Gehrke:2016:TPN

[2111] Johannes Gehrke. Technical perspective: Naiad. *Communications of the ACM*, 59(10):74, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207773/fulltext`.

Murray:2016:IID

[2112] Derek G. Murray, Frank McSherry, Michael Isard, Rebecca Isaacs, Paul Barham, and Martín Abadi. Incremental, iterative data processing with timely dataflow. *Communications of the ACM*, 59(10): 75–83, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207774/fulltext`.

Larus:2016:TPP

[2113] James Larus. Technical perspective: The power of parallelizing computations. *Communications of the ACM*, 59(10):84, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207754/fulltext`.

Maleki:2016:EPU

[2114] Saeed Maleki, Madanlal Musuvathi, and Todd Mytkowicz. Efficient parallelization using rank convergence in dynamic programming algorithms.

Communications of the ACM, 59 (10):85–92, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207775/fulltext`.

Shasha:2016:LBF

[2115] Dennis Shasha. Last byte: Find me quickly. *Communications of the ACM*, 59(10):96, October 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/10/207764/fulltext`.

Vardi:2016:DGC

[2116] Moshe Y. Vardi. Departments: Globalization, computing, and their political impact. *Communications of the ACM*, 59(11):5, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/11/209126/fulltext`.

Cerf:2016:DHA

[2117] Vinton G. Cerf. Departments: Heidelberg anew. *Communications of the ACM*, 59(11):7, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/11/209139/fulltext`.

Staff:2016:LELb

[2118] CACM Staff. Letters to the Editor: Learn to live with academic rankings. *Communications of the ACM*, 59(11):8–9, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/11/209131/fulltext`.

Barr:2016:BIC

[2119] Valerie Barr and Mark Guzdial. BLOG@CACM: Introducing CS to newcomers, and JES as a teaching tool. *Communications of the ACM*, 59 (11):10–11, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/11/209114/fulltext`.

Klarreich:2016:NLS

[2120] Erica Klarreich. News: Learning securely. *Communications of the ACM*, 59(11):12–14, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/11/209133/fulltext`.

Underwood:2016:NBB

[2121] Sarah Underwood. News: Blockchain beyond Bitcoin. *Communications of the ACM*, 59(11):15–17, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/11/209132/fulltext`.

Geller:2016:NFA

[2122] Tom Geller. News: Farm automation gets smarter. *Communications of the ACM*, 59(11):18–19, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/11/209134/fulltext`.

Schell:2016:PSC

[2123] Roger R. Schell. Privacy and security: Cyber defense triad for where security matters. *Communications of the ACM*, 59(11):20–23, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209127/fulltext.

Samuelson:2016:LSF

[2124] Pamela Samuelson. Legally speaking: Fair use prevails in Oracle v. Google. *Communications of the ACM*, 59(11):24–28, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209118/fulltext.

Iyer:2016:EBD

[2125] Bala R. Iyer and Rahul C. Basole. Economic and business dimensions: Visualization to understand ecosystems. *Communications of the ACM*, 59(11):27–30, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209135/fulltext.

Guzdial:2016:EGC

[2126] Mark Guzdial and Briana Morrison. Education: Growing computer science education into a STEM education discipline. *Communications of the ACM*, 59(11):31–33, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209119/fulltext.

Copeland:2016:VTR

[2127] Jack Copeland, Eli Dresner, Diane Proudfoot, and Oron Shagrir. Viewpoint: Time to reinspect the foundations? *Communications of the ACM*, 59(11):34–38, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209121/fulltext.

Grudin:2016:VTA

[2128] Jonathan Grudin. Viewpoint: Technology and academic lives. *Communications of the ACM*, 59(11):37–39, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209120/fulltext.

Helland:2016:PB

[2129] Pat Helland. The power of babble. *Communications of the ACM*, 59(11):40–43, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209137/fulltext.

Morrison:2016:SSM

[2130] Adam Morrison. Scaling synchronization in multicore programs. *Communications of the ACM*, 59(11):44–51, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209138/fulltext.

Bailis:2016:RPD

[2131] Peter Bailis, Camille Fournier, Joy Arulraj, and Andrew Pavlo. Research for practice: distributed consensus and implications of NVM on database management systems. *Communications of the ACM*, 59(11):52–55, November 2016. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209136/fulltext.

Zaharia:2016:ASU

[2132] Matei Zaharia, Reynold S. Xin, Patrick Wendell, Tathagata Das, Michael Armbrust, Ankur Dave, Xiangrui Meng, Josh Rosen, Shivaram Venkataraman, Michael J. Franklin, Ali Ghodsi, Joseph Gonzalez, Scott Shenker, and Ion Stoica. Apache Spark: a unified engine for big data processing. *Communications of the ACM*, 59 (11):56–65, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209116/fulltext.

Florencio:2016:PSD

[2133] Dinei Florêncio, Cormac Herley, and Paul C. Van Oorschot. Pushing on string: the 'don't care' region of password strength. *Communications of the ACM*, 59(11): 66–74, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209115/fulltext.

Bozzo:2016:TPN

[2134] Enrico Bozzo and Massimo Franceschet. A theory on power in networks. *Communications of the ACM*, 59(11): 75–83, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209117/fulltext.

Livnat:2016:SAT

[2135] Adi Livnat and Christos Papadimitriou. Sex as an algorithm: the theory of evolution under the lens of computation. *Communications of the ACM*, 59 (11):84–93, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209128/fulltext.

Jannach:2016:RSB

[2136] Dietmar Jannach, Paul Resnick, Alexander Tuzhilin, and Markus Zanker. Recommender systems — : beyond matrix completion. *Communications of the ACM*, 59(11): 94–102, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209129/fulltext.

Keutzer:2016:ICO

[2137] Kurt Keutzer. If I could only design one circuit ...: technical perspective. *Communications of the ACM*, 59(11):104, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209125/fulltext.

Chen:2016:DFE

[2138] Yunji Chen, Tianshi Chen, Zhiwei Xu, Ninghui Sun, and Olivier Temam. DianNao family: energy-efficient hardware accelerators for machine learning. *Communications of the ACM*, 59 (11):105–112, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http:/

/cacm.acm.org/magazines/2016/11/209123/fulltext.

Hoe:2016:FCA

[2139] James C. Hoe. FPGA compute acceleration is first about energy efficiency: technical perspective. *Communications of the ACM*, 59(11): 113, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209122/fulltext.

Putnam:2016:RFA

[2140] Andrew Putnam, Adrian M. Caulfield, Eric S. Chung, Derek Chiou, Kypros Constantinides, John Demme, Hadi Esmaeilzadeh, Jeremy Fowers, Gopi Prashanth Gopal, Jan Gray, Michael Haselman, Scott Hauck, Stephen Heil, Amir Hormati, Joo-Young Kim, Sitaram Lanka, James Larus, Eric Peterson, Simon Pope, Aaron Smith, Jason Thong, Phillip Yi Xiao, and Doug Burger. A reconfigurable fabric for accelerating large-scale datacenter services. *Communications of the ACM*, 59(11): 114–122, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209124/fulltext.

Clegg:2016:LBC

[2141] Brian Clegg. Last byte: The candidate. *Communications of the ACM*, 59 (11):136–ff, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/11/209130/fulltext.

Wolf:2016:DAC

[2142] Marty J. Wolf. Departments: The ACM code of ethics: a call to action. *Communications of the ACM*, 59(12):6, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/12/210366/fulltext.

Brinkman:2016:DMP

[2143] Bo Brinkman, Don Gotterbarn, Keith Miller, and Marty J. Wolf. Departments: Making a positive impact: updating the ACM code of ethics. *Communications of the ACM*, 59(12):7–13, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/12/210367/fulltext.

Cerf:2016:DWE

[2144] Vinton G. Cerf. Departments: When email isn't private. *Communications of the ACM*, 59(12): 15, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/12/210385/fulltext.

Staff:2016:LERb

[2145] CACM Staff. Letters to the Editor: Reclaim the lost promise of the Semantic Web. *Communications of the ACM*, 59(12):17, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/12/210384/fulltext.

Guzdial:2016:BIS

[2146] Mark Guzdial and Daniel Reed. BLOG@CACM: ICER 2016, and Star Trek at 50. *Communications of the ACM*, 59(12):18–19, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210368/fulltext`.

Greengard:2016:NCC

[2147] Samuel Greengard. News: Cracking the code on biology. *Communications of the ACM*, 59(12): 21–23, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210378/fulltext`.

Edwards:2016:NCP

[2148] Chris Edwards. News: Containers push toward the Mayfly server. *Communications of the ACM*, 59(12): 24–26, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210377/fulltext`.

Kirkpatrick:2016:NCW

[2149] Keith Kirkpatrick. News: Can we trust autonomous weapons? *Communications of the ACM*, 59(12): 27–29, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210376/fulltext`.

Denning:2016:PIL

[2150] Peter J. Denning and Gloria Flores. The profession of IT: Learning to learn. *Communications of the ACM*, 59 (12):32–36, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210369/fulltext`.

Anderson:2016:HRN

[2151] David P. Anderson. Historical reflections: Nailing smoke. *Communications of the ACM*, 59(12): 37–39, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210361/fulltext`.

Chen:2016:BPM

[2152] Yan Chen. Broadening participation: Mentoring female assistant professors enhances their success. *Communications of the ACM*, 59(12): 40–42, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210370/fulltext`.

Hazzan:2016:VAA

[2153] Orit Hazzan and Jeff Kramer. Viewpoint: Assessing abstraction skills. *Communications of the ACM*, 59(12): 43–45, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210380/fulltext`.

Traff:2016:VMM

[2154] Jesper Larsson Träff. Viewpoint: (mis)managing parallel computing research through EU project funding. *Communications of the ACM*, 59(12): 46–48, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210379/fulltext`.

Eriksen:2016:FS

[2155] Marius Eriksen. Functional at scale. *Communications of the ACM*, 59(12): 50–55, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210381/fulltext`.

Staff:2016:RFF

[2156] CACM Staff. React: Facebook's functional turn on writing Javascript. *Communications of the ACM*, 59(12): 56–62, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210382/fulltext`.

Jacobson:2016:ISA

[2157] Ivar Jacobson, Ian Spence, and Ed Seidewitz. Industrial-scale agile: from craft to engineering. *Communications of the ACM*, 59(12): 63–71, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210383/fulltext`.

Ynnerman:2016:IVS

[2158] Anders Ynnerman, Thomas Rydell, Daniel Antoine, David Hughes, Anders Persson, and Patric Ljung. Interactive visualization of 3D scanned mummies at public venues. *Communications of the ACM*, 59(12): 72–81, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210363/fulltext`.

Sagar:2016:CCA

[2159] Mark Sagar, Mike Seymour, and Annette Henderson. Creating connection with autonomous facial animation. *Communications of the ACM*, 59 (12):82–91, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210362/fulltext`.

Shilton:2016:APS

[2160] Katie Shilton, Jeffrey A. Burke, kc claffy, and Lixia Zhang. Anticipating policy and social implications of named data networking. *Communications of the ACM*, 59(12): 92–101, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2016/12/210365/fulltext`.

Chen:2016:MFS

[2161] Yiling Chen, Arpita Ghosh, Michael Kearns, Tim Roughgarden, and Jennifer Wortman Vaughan. Mathematical foundations for social computing. *Communications of the ACM*, 59(12): 102–108, December 2016. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/12/210364/fulltext.

Keshav:2016:CSD

[2162] Srinivasan Keshav. The chemistry of software-defined batteries: technical perspective. *Communications of the ACM*, 59(12): 110, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/12/210373/fulltext.

Badam:2016:SDB

[2163] Anirudh Badam, Ranveer Chandra, Jon Dutra, Anthony Ferrese, Steve Hodges, Pan Hu, Julia Meinershagen, Thomas Moscibroda, Bodhi Priyantha, and Evangelia Skiani. Software-defined batteries. *Communications of the ACM*, 59(12): 111–119, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/12/210372/fulltext.

Igarashi:2016:IEM

[2164] Takeo Igarashi. 3D image editing made easy: technical perspective. *Communications of the ACM*, 59(12):120, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/12/210371/fulltext.

Chen:2016:EOP

[2165] Tao Chen, Zhe Zhu, Shi-Min Hu, Daniel Cohen-Or, and Ariel Shamir. Extracting 3D objects from photographs using 3-sweep. *Communications of the ACM*, 59(12):121–129, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/12/210374/fulltext.

Hoffmann:2016:LBV

[2166] Leah Hoffmann. Last byte: A view to the future. *Communications of the ACM*, 59(12):144–ff, December 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2016/12/210375/fulltext.

Vardi:2017:TME

[2167] Moshe Y. Vardi. Technology for the most effective use of mankind. *Communications of the ACM*, 60(1): 5, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211090/fulltext.

Hanson:2017:AFC

[2168] Vicki L. Hanson. The ACM future of computing academy. *Communications of the ACM*, 60(1):7, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211091/fulltext.

Cerf:2017:IMI

[2169] Vinton G. Cerf. Information and misinformation on the Internet. *Communications of the ACM*, 60(1):9, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317

(electronic). URL http://cacm.acm.org/magazines/2017/1/211112/fulltext.

Barr:2017:BHW

[2170] Valerie Barr, Michael Stonebraker, Raul Castro Fernandez, Dong Deng, and Michael Brodie. BLOG@CACM: How we teach CS2All, and what to do about database decay. *Communications of the ACM*, 60(1):10–11, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211109/fulltext.

Monroe:2017:NPR

[2171] Don Monroe. News: Pure randomness extracted from two poor sources. *Communications of the ACM*, 60(1):13–15, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211100/fulltext.

Wright:2017:NMI

[2172] Alex Wright. News: Mapping the Internet of Things. *Communications of the ACM*, 60(1):16–18, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211101/fulltext.

Mone:2017:NBT

[2173] Gregory Mone. News: Bias in technology. *Communications of the ACM*, 60(1):19–20, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211099/fulltext.

Cusumano:2017:TSMa

[2174] Michael A. Cusumano. Technology strategy and management: Is Google's Alphabet a good bet? *Communications of the ACM*, 60(1):22–25, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211092/fulltext.

Geist:2017:LTW

[2175] Michael Geist. Law and technology: Why less is more when it comes to Internet jurisdiction. *Communications of the ACM*, 60(1):26–28, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211110/fulltext.

Haigh:2017:HRC

[2176] Thomas Haigh. Historical reflections: Colossal genius: Tutte, Flowers, and a bad imitation of Turing. *Communications of the ACM*, 60(1):29–35, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211102/fulltext.

Kaplan:2017:VAI

[2177] Jerry Kaplan. Viewpoint: Artificial intelligence: think again. *Communications of the ACM*, 60(1):36–38, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.

acm.org/magazines/2017/1/211103/fulltext.

Straub:2017:VEI

[2178] Jeremy Straub. Viewpoint: Effects of international trafficking in arms regulations changes. *Communications of the ACM*, 60(1):39–41, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211107/fulltext.

Matsudaira:2017:RC

[2179] Kate Matsudaira. Resolving conflict. *Communications of the ACM*, 60(1):42–44, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211104/fulltext.

Bailey:2017:FDS

[2180] Josh Bailey and Stephen Stuart. Faucet: deploying SDN in the enterprise. *Communications of the ACM*, 60(1):45–49, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211106/fulltext.

Bailis:2017:RPW

[2181] Peter Bailis, Jean Yang, Vijay Janapa Reddi, and Yuhao Zhu. Research for practice: Web security and mobile Web computing. *Communications of the ACM*, 60(1):50–53, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211105/fulltext.

Denning:2017:ELC

[2182] Peter J. Denning and Ted G. Lewis. Exponential laws of computing growth. *Communications of the ACM*, 60(1):54–65, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211094/fulltext.

Chua:2017:BEI

[2183] Cecil Eng Huang Chua and Veda C. Storey. Bottom-up enterprise information systems: rethinking the roles of central IT departments. *Communications of the ACM*, 60(1):66–72, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211093/fulltext.

Yener:2017:CGI

[2184] Bülent Yener. Cell-graphs: image-driven modeling of structure-function relationship. *Communications of the ACM*, 60(1):74–84, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211111/fulltext.

Szeliski:2017:MMR

[2185] Richard Szeliski. Magnifying motions the right way: technical perspective. *Communications of the ACM*, 60(1):86, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/1/211097/fulltext.

Wadhwa:2017:EVM

[2186] Neal Wadhwa, Hao-Yu Wu, Abe Davis, Michael Rubinstein, Eugene Shih, Gautham J. Mysore, Justin G. Chen, Oral Buyukozturk, John V. Guttag, William T. Freeman, and Frédo Durand. Eulerian video magnification and analysis. *Communications of the ACM*, 60(1):87–95, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/1/211095/fulltext`.

Salapura:2017:MUT

[2187] Valentina Salapura. Mapping the universe: technical perspective. *Communications of the ACM*, 60(1):96, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/1/211096/fulltext`.

Habib:2017:HES

[2188] Salman Habib, Vitali Morozov, Nicholas Frontiere, Hal Finkel, Adrian Pope, Katrin Heitmann, Kalyan Kumaran, Venkatram Vishwanath, Tom Peterka, Joe Insley, David Daniel, Patricia Fasel, and Zarija Lukić. HACC: extreme scaling and performance across diverse architectures. *Communications of the ACM*, 60(1):97–104, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/1/211098/fulltext`.

Shasha:2017:LBO

[2189] Dennis Shasha. Last byte: Open field tic-tac-toe. *Communications of the ACM*, 60(1):112, January 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/1/211108/fulltext`.

Hanson:2017:DCY

[2190] Vicki L. Hanson. Departments: Celebrating 50 years of the Turing award. *Communications of the ACM*, 60(2):5, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/2/212441/fulltext`.

Berman:2017:DSE

[2191] Francine Berman and Vinton G. Cerf. Departments: Social and ethical behavior in the Internet of Things. *Communications of the ACM*, 60(2):6–7, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/2/212443/fulltext`.

Staff:2017:LEU

[2192] CACM Staff. Letters to the Editor: Use the scientific method in computer science. *Communications of the ACM*, 60(2):8–9, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/2/212426/fulltext`.

Staff:2017:PPA

[2193] CACM Staff. Panels in print: Artificial intelligence. *Communications of the ACM*, 60(2):10–11, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317

(electronic). URL http://cacm.acm.org/magazines/2017/2/212433/fulltext.

Davis:2017:BLA

[2194] Janet Davis. BLOG@CACM: Liberal arts academia wants YOU! *Communications of the ACM*, 60(2):12–13, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212444/fulltext.

Edwards:2017:NSQ

[2195] Chris Edwards. News: Secure quantum communications. *Communications of the ACM*, 60(2):15–17, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212424/fulltext.

Greengard:2017:NCCa

[2196] Samuel Greengard. News: Are computer chips the new security threat? *Communications of the ACM*, 60(2):18–19, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212423/fulltext.

Kirkpatrick:2017:NAD

[2197] Keith Kirkpatrick. News: It's not the algorithm, it's the data. *Communications of the ACM*, 60(2):21–23, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212422/fulltext.

Lindqvist:2017:IRF

[2198] Ulf Lindqvist and Peter G. Neumann. Inside risks: The future of the Internet of Things. *Communications of the ACM*, 60(2):26–30, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212425/fulltext.

Yadav:2017:EFC

[2199] Aman Yadav and Steve Cooper. Education: Fostering creativity through computing. *Communications of the ACM*, 60(2):31–33, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212434/fulltext.

Neville-Neil:2017:KVU

[2200] George V. Neville-Neil. Kode vicious: The unholy trinity of software development. *Communications of the ACM*, 60(2):34–36, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212435/fulltext.

Bestavros:2017:PSU

[2201] Azer Bestavros, Andrei Lapets, and Mayank Varia. Privacy and security: User-centric distributed solutions for privacy-preserving analytics. *Communications of the ACM*, 60(2):37–39, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212427/fulltext.

Bundy:2017:VSM

[2202] Alan Bundy. Viewpoint: Smart machines are not a threat to humanity. *Communications of the ACM*, 60 (2):40–42, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/2/212436/fulltext`.

Dubhashi:2017:VAD

[2203] Devdatt Dubhashi and Shalom Lappin. Viewpoint: AI dangers: imagined and real. *Communications of the ACM*, 60(2):43–45, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/2/212437/fulltext`.

Helland:2017:LBD

[2204] Pat Helland. Life beyond distributed transactions. *Communications of the ACM*, 60(2):46–54, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/2/212429/fulltext`.

Limoncelli:2017:YLB

[2205] Thomas A. Limoncelli. Are you load balancing wrong? *Communications of the ACM*, 60(2):55–57, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/2/212430/fulltext`.

Cardwell:2017:BCB

[2206] Neal Cardwell, Yuchung Cheng, C. Stephen Gunn, Soheil Hassas Yeganeh, and Van Jacobson. BBR: congestion-based congestion control. *Communications of the ACM*, 60(2): 58–66, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/2/212428/fulltext`.

Danaher:2017:CED

[2207] Brett Danaher, Michael D. Smith, and Rahul Telang. Copyright enforcement in the digital age: empirical evidence and policy implications. *Communications of the ACM*, 60(2):68–75, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/2/212432/fulltext`.

Bruderer:2017:CHB

[2208] Herbert Bruderer. Computing history beyond the U.K. and U.S.: selected landmarks from continental Europe. *Communications of the ACM*, 60(2):76–84, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/2/212431/fulltext`.

Vaandrager:2017:ML

[2209] Frits Vaandrager. Model learning. *Communications of the ACM*, 60(2): 86–95, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/2/212445/fulltext`.

Rescorla:2017:TPC

[2210] Eric Rescorla. Technical perspective: Cleaning up flaws in TLS implementations. *Communications of the ACM*, 60(2):98, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212439/fulltext.

Beurdouche:2017:MSU

[2211] Benjamin Beurdouche, Karthikeyan Bhargavan, Antoine Delignat-Lavaud, Cédric Fournet, Markulf Kohlweiss, Alfredo Pironti, Pierre-Yves Strub, and Jean Karim Zinzindohoue. A messy state of the union: taming the composite state machines of TLS. *Communications of the ACM*, 60(2): 99–107, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212438/fulltext.

Martinovic:2017:AUP

[2212] Ivan Martinovic, Kasper Rasmussen, Marc Roeschlin, and Gene Tsudik. Authentication using pulse-response biometrics. *Communications of the ACM*, 60(2):108–115, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212440/fulltext.

Bainbridge:2017:LBF

[2213] William Sims Bainbridge. Last byte: Fatal guidance. *Communications of the ACM*, 60(2):120–ff, February 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/2/212442/fulltext.

Vardi:2017:DAO

[2214] Moshe Y. Vardi. Departments: ACM's open-conference principle and political reality. *Communications of the ACM*, 60(3):5, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213832/fulltext.

Hanson:2017:DAC

[2215] Vicki L. Hanson. Departments: ACM's commitment to accessibility. *Communications of the ACM*, 60(3):7, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213833/fulltext.

Cerf:2017:DGO

[2216] Vinton G. Cerf. Departments: Grumpy old cells. *Communications of the ACM*, 60(3):9, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213838/fulltext.

Staff:2017:LEA

[2217] CACM Staff. Letters to the Editor: Address the consequences of AI in advance. *Communications of the ACM*, 60(3):10–11, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213824/fulltext.

Guzdial:2017:BSE

[2218] Mark Guzdial and Robin K. Hill. BLOG@CACM: The slow evolution of CS for all, the beauty of programs. *Communications of the ACM*, 60(3):12–13, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213835/fulltext.

Savage:2017:NTD

[2219] Neil Savage. News: Thinking deeply to make better speech. *Communications of the ACM*, 60(3):15–17, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213815/fulltext.

Greengard:2017:NFS

[2220] Samuel Greengard. News: The future of semiconductors. *Communications of the ACM*, 60(3):18–20, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213818/fulltext.

Kirkpatrick:2017:NFD

[2221] Keith Kirkpatrick. News: Financing the dark web. *Communications of the ACM*, 60(3):21–22, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213816/fulltext.

Staff:2017:NAR

[2222] CACM Staff. News: ACM recognizes new Fellows. *Communications of the ACM*, 60(3):23, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213817/fulltext.

Samuelson:2017:LSS

[2223] Pamela Samuelson. Legally speaking: Supreme Court on design patent damages in Samsung v. Apple. *Communications of the ACM*, 60(3):26–28, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213836/fulltext.

Varki:2017:CEW

[2224] Elizabeth Varki. Computing ethics: Where review goes wrong. *Communications of the ACM*, 60(3):29–30, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213819/fulltext.

Denning:2017:PIMa

[2225] Peter J. Denning, Matti Tedre, and Pat Yongpradit. The profession of IT: Misconceptions about computer science. *Communications of the ACM*, 60(3):31–33, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213837/fulltext.

Philip:2017:VLM

[2226] Thomas M. Philip. Viewpoint: Learning with mobile technologies. *Communications of the ACM*, 60(3):34–36, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.

acm.org/magazines/2017/3/213820/fulltext.

Schlossnagle:2017:TF

[2227] Theo Schlossnagle. Time, but faster. *Communications of the ACM*, 60 (3):38–41, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213822/fulltext.

Zahran:2017:HCH

[2228] Mohamed Zahran. Heterogeneous computing: here to stay. *Communications of the ACM*, 60(3):42–45, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213821/fulltext.

Bailis:2017:RPD

[2229] Peter Bailis, Irene Zhang, and Fadel Adib. Research for practice: distributed transactions and networks as physical sensors. *Communications of the ACM*, 60(3):46–49, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213823/fulltext.

Lazar:2017:MFC

[2230] Jonathan Lazar, Elizabeth F. Churchill, Tovi Grossman, Gerrit van der Veer, Philippe Palanque, John “Scooter” Morris, and Jennifer Mankoff. Making the field of computing more inclusive. *Communications of the ACM*, 60(3):50–59, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213827/fulltext.

Mazzola:2017:PTI

[2231] Daniel J. Mazzola, Robert D. St. Louis, and Mohan R. Tanniru. The path to the top: insights from career histories of top CIOs. *Communications of the ACM*, 60(3):60–68, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213828/fulltext.

Price:2017:CSA

[2232] Simon Price and Peter A. Flach. Computational support for academic peer review: a perspective from artificial intelligence. *Communications of the ACM*, 60(3):70–79, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213825/fulltext.

Keshav:2017:PWF

[2233] Srinivasan Keshav. The power of wi-fi to deliver power: technical perspective. *Communications of the ACM*, 60(3):82, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213829/fulltext.

Talla:2017:PNB

[2234] Vamsi Talla, Bryce Kellogg, Benjamin Ransford, Saman Naderiparizi, Joshua R. Smith, and Shyamnath Gollakota. Powering the next billion devices with wi-fi. *Commu-*

nications of the ACM, 60(3):83–91, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213830/fulltext.

Libkin:2017:DDF

[2235] Leonid Libkin. Data distribution for fast joins: technical perspective. *Communications of the ACM*, 60(3):92, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213831/fulltext.

Ameloot:2017:RDP

[2236] Tom J. Ameloot, Gaetano Geck, Bas Ketsman, Frank Neven, and Thomas Schwentick. Reasoning on data partitioning for single-round multi-join evaluation in massively parallel systems. *Communications of the ACM*, 60(3):93–100, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213834/fulltext.

Hoffmann:2017:LBB

[2237] Leah Hoffmann. Last byte: Out of bounds. *Communications of the ACM*, 60(3):104–ff, March 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/3/213826/fulltext.

Barr:2017:DGD

[2238] Valerie Barr. Departments: Gender diversity in computing: are we making any progress? *Communications of the ACM*, 60(4):5, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215046/fulltext.

Cerf:2017:DGT

[2239] Vinton G. Cerf. Departments: A genetic theory of the Silicon Valley phenomenon. *Communications of the ACM*, 60(4):7, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215047/fulltext.

Staff:2017:LECa

[2240] CACM Staff. Letters to the Editor: Consider indirect threats of AI, too. *Communications of the ACM*, 60(4):8–9, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215042/fulltext.

Arquilla:2017:BCN

[2241] John Arquilla and Mark Guzdial. BLOG@CACM: Crafting a national cyberdefense, and preparing to support computational literacy. *Communications of the ACM*, 60(4):10–11, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215036/fulltext.

Mone:2017:NSB

[2242] Gregory Mone. News: Sensors on the brain. *Communications of the ACM*, 60(4):12–14, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http:

//cacm.acm.org/magazines/2017/4/215026/fulltext.

Edwards:2017:NDW

[2243] Chris Edwards. News: Digitizing the world. *Communications of the ACM*, 60(4):15–16, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215027/fulltext.

Shein:2017:NCA

[2244] Esther Shein. News: Computing the arts. *Communications of the ACM*, 60(4):17–19, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215028/fulltext.

Staff:2017:NC

[2245] CACM Staff. News: Cybersecurity. *Communications of the ACM*, 60(4):20–21, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215041/fulltext.

Buskens:2017:GCO

[2246] Ineke Buskens. Global computing: Online social networks and global women's empowerment. *Communications of the ACM*, 60(4):22–23, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215029/fulltext.

Neville-Neil:2017:KVC

[2247] George V. Neville-Neil. Kode vicious: The chess player who couldn't pass the salt. *Communications of the ACM*, 60(4):24–25, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215030/fulltext.

Regli:2017:VWT

[2248] William Regli. Viewpoint: Wanted: toolsmiths. *Communications of the ACM*, 60(4):26–28, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215037/fulltext.

Strickler:2017:VWI

[2249] Yancey Strickler. Viewpoint: What it means to be an entrepreneur today. *Communications of the ACM*, 60(4):29–31, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215038/fulltext.

Yu:2017:PDA

[2250] Meng-Day (Mandel) Yu and Srinivas Devadas. Pervasive, dynamic authentication of physical items. *Communications of the ACM*, 60(4):32–39, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215034/fulltext.

Seacord:2017:UR

[2251] Robert C. Seacord. Uninitialized reads. *Communications of the ACM*, 60(4):40–44, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http:

//cacm.acm.org/magazines/2017/4/215033/fulltext.

Matsudaira:2017:DAL

[2252] Kate Matsudaira. Does anybody listen to you? *Communications of the ACM*, 60(4):45–46, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215035/fulltext.

Barroso:2017:AKM

[2253] Luiz Barroso, Mike Marty, David Patterson, and Parthasarathy Ranganathan. Attack of the killer microseconds. *Communications of the ACM*, 60(4):48–54, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215032/fulltext.

Yadav:2017:CTT

[2254] Aman Yadav, Chris Stephenson, and Hai Hong. Computational thinking for teacher education. *Communications of the ACM*, 60(4):55–62, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215031/fulltext.

Bouguettaya:2017:SCM

[2255] Athman Bouguettaya, Munindar Singh, Michael Huhns, Quan Z. Sheng, Hai Dong, Qi Yu, Azadeh Ghari Neiat, Sajib Mistry, Boualem Benatallah, Brahim Medjahed, Mourad Ouzzani, Fabio Casati, Xumin Liu, Hongbing Wang, Dimitrios Georgakopoulos, Liang Chen, Surya Nepal, Zaki Malik, Abdelkarim Erradi, Yan Wang, Brian Blake, Schahram Dustdar, Frank Leymann, and Michael Papazoglou. A service computing manifesto: the next 10 years. *Communications of the ACM*, 60(4):64–72, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215039/fulltext.

Heiser:2017:TPP

[2256] Gernot Heiser. Technical perspective: Proving file systems meet expectations. *Communications of the ACM*, 60(4):74, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215043/fulltext.

Chajed:2017:CFS

[2257] Tej Chajed, Haogang Chen, Adam Chlipala, M. Frans Kaashoek, Nickolai Zeldovich, and Daniel Ziegler. Certifying a file system using Crash Hoare logic: correctness in the presence of crashes. *Communications of the ACM*, 60(4):75–84, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215044/fulltext.

Ullman:2017:TPB

[2258] Jonathan Ullman. Technical Perspective: Building a safety net for data reuse. *Communications of the ACM*, 60(4):85, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215045/fulltext.

Dwork:2017:GFD

[2259] Cynthia Dwork, Vitaly Feldman, Moritz Hardt, Toniann Pitassi, Omer Reingold, and Aaron Roth. Guilt-free data reuse. *Communications of the ACM*, 60(4):86–93, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215040/fulltext.

Shasha:2017:LBS

[2260] Dennis Shasha. Last byte: Stacking the deck. *Communications of the ACM*, 60(4):96, April 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/4/215048/fulltext.

Vardi:2017:ELC

[2261] Moshe Y. Vardi. Editor's letter: Cyber insecurity and cyber libertarianism. *Communications of the ACM*, 60(5):5, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216316/fulltext.

Cerf:2017:CCL

[2262] Vinton G. Cerf. Cerf's up: Can liberty survive the digital age? *Communications of the ACM*, 60(5):7, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216333/fulltext.

Meyer:2017:BEN

[2263] Bertrand Meyer. BLOG@CACM: Ending null pointer crashes. *Communications of the ACM*, 60(5):8–9, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216322/fulltext.

Shein:2017:NCC

[2264] Esther Shein. News: Combating cancer with data. *Communications of the ACM*, 60(5):10–12, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216323/fulltext.

Greengard:2017:NMC

[2265] Samuel Greengard. News: Making chips smarter. *Communications of the ACM*, 60(5):13–15, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216326/fulltext.

Kirkpatrick:2017:NBC

[2266] Keith Kirkpatrick. News: Bionics in competition. *Communications of the ACM*, 60(5):16–17, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216324/fulltext.

Staff:2017:NIT

[2267] CACM Staff. News: The Internet of Things. *Communications of the ACM*, 60(5):18–19, May 2017. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216325/fulltext.

Hartzog:2017:LTA

[2268] Woodrow Hartzog and Ira Rubinstein. Law and technology: The anonymization debate should be about risk, not perfection. *Communications of the ACM*, 60(5):22–24, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216327/fulltext.

Porter:2017:EPT

[2269] Leo Porter, Cynthia Lee, Beth Simon, and Mark Guzdial. Education: Preparing tomorrow's faculty to address challenges in teaching computer science. *Communications of the ACM*, 60(5):25–27, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216317/fulltext.

Wallach:2017:VTB

[2270] Wendell Wallach. Viewpoint: Toward a ban on lethal autonomous weapons: surmounting the obstacles. *Communications of the ACM*, 60(5):28–34, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216318/fulltext.

Meijer:2017:MMU

[2271] Erik Meijer. Making money using math. *Communications of the ACM*, 60(5):36–42, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216319/fulltext.

Guo:2017:MJF

[2272] Robert Guo. MongoDB's JavaScript fuzzer. *Communications of the ACM*, 60(5):43–47, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216320/fulltext.

Bailis:2017:RPC

[2273] Peter Bailis, Arvind Narayanan, Andrew Miller, and Song Han. Research for practice: cryptocurrencies, blockchains, and smart contracts; hardware for deep learning. *Communications of the ACM*, 60(5):48–51, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216321/fulltext.

Marshall:2017:WOS

[2274] Catherine C. Marshall and Frank M. Shipman. Who owns the social web? *Communications of the ACM*, 60(5):52–61, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216329/fulltext.

Jirotka:2017:RRI

[2275] Marina Jirotka, Barbara Grimpe, Bernd Stahl, Grace Eden, and Mark Hartswood. Responsible research and innovation in the digital age. *Communications of the ACM*, 60(5):62–68, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317

(electronic). URL http://cacm.acm.org/magazines/2017/5/216330/fulltext.

Vojnovic:2017:CT

[2276] Milan Vojnović. Contest theory. *Communications of the ACM*, 60(5):70–80, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216331/fulltext.

Blelloch:2017:TPF

[2277] Guy Blelloch. Technical perspective: Functional compilers. *Communications of the ACM*, 60(5):82, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216313/fulltext.

Mainland:2017:EVI

[2278] Geoffrey Mainland, Roman Leshchinskiy, and Simon Peyton Jones. Exploiting vector instructions with generalized stream fusion. *Communications of the ACM*, 60(5):83–91, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216312/fulltext.

Halevy:2017:TPB

[2279] Alon Halevy. Technical perspective: Building knowledge bases from messy data. *Communications of the ACM*, 60(5):92, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216315/fulltext.

Zhang:2017:DDK

[2280] Ce Zhang, Christopher Ré, Michael Cafarella, Christopher De Sa, Alex Ratner, Jaeho Shin, Feiran Wang, and Sen Wu. DeepDive: declarative knowledge base construction. *Communications of the ACM*, 60(5):93–102, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216314/fulltext.

Batchelor:2017:LBB

[2281] David Allen Batchelor. Last byte: Beyond ‘Star Trek’. *Communications of the ACM*, 60(5):104–ff, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216332/fulltext.

Brinkman:2017:DLP

[2282] Bo Brinkman, Catherine Flick, Don Gotterbarn, Keith Miller, Kate Vazansky, and Marty J. Wolf. Departments: Listening to professional voices: draft 2 of the ACM code of ethics and professional conduct. *Communications of the ACM*, 60(5):105–111, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/5/216328/fulltext.

Vardi:2017:ELT

[2283] Moshe Y. Vardi. Editor’s letter: Ten years at the helm of *Communications of the ACM*. *Communications of the ACM*, 60(6):5, June 2017. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217729/fulltext.

Cerf:2017:COA

[2284] Vinton G. Cerf. Cerf's up: Open access to academic research. *Communications of the ACM*, 60(6):7, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217738/fulltext.

Staff:2017:LETa

[2285] CACM Staff. Letters to the Editor: Technologies do have ethics. *Communications of the ACM*, 60(6):8–9, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217740/fulltext.

Guzdial:2017:BBT

[2286] Mark Guzdial. BLOG@CACM: Balancing teaching CS efficiently with motivating students. *Communications of the ACM*, 60(6):10–11, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217739/fulltext.

Monroe:2017:NDL

[2287] Don Monroe. News: Deep learning takes on translation. *Communications of the ACM*, 60(6):12–14, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217734/fulltext.

Edwards:2017:NOS

[2288] Chris Edwards. News: Optimization search finds a heart of glass. *Communications of the ACM*, 60(6):15–16, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217733/fulltext.

Underwood:2017:NPP

[2289] Sarah Underwood. News: Potential and peril. *Communications of the ACM*, 60(6):17–19, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217730/fulltext.

Savage:2017:NWW

[2290] Neil Savage. News: Weaving the web. *Communications of the ACM*, 60(6):20–22, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217732/fulltext.

Staff:2017:NBD

[2291] CACM Staff. News: Big data. *Communications of the ACM*, 60(6):24–25, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217731/fulltext.

Neumann:2017:IRT

[2292] Peter G. Neumann. Inside risks: Trustworthiness and truthfulness are essential. *Communications of the ACM*, 60(6):26–28, June 2017. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217748/fulltext.

Goodyear:2017:BPI

[2293] Leslie Goodyear, Gary Silverstein, and Linda P. Thurston. Broadening participation: The influence and promise of alliances. *Communications of the ACM*, 60(6):29–30, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217749/fulltext.

Neville-Neil:2017:KVF

[2294] George V. Neville-Neil. Kode vicious: Forced exception handling. *Communications of the ACM*, 60(6):31–32, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217741/fulltext.

Denning:2017:VRT

[2295] Peter J. Denning. Viewpoint: Remaining trouble spots with computational thinking. *Communications of the ACM*, 60(6):33–39, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217742/fulltext.

ODell:2017:DMS

[2296] Devon H. O'Dell. The debugging mindset. *Communications of the ACM*, 60(6):40–45, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217751/fulltext.

Helland:2017:TBF

[2297] Pat Helland, Simon Weaver, and Ed Harris. Too big NOT to fail. *Communications of the ACM*, 60(6):46–50, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217752/fulltext.

Matsudaira:2017:CTL

[2298] Kate Matsudaira and Erik Meijer. Conversations with technology leaders: Erik Meijer. *Communications of the ACM*, 60(6):51–54, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217750/fulltext.

Barrera:2017:SIA

[2299] David Barrera, Laurent Chuat, Adrian Perrig, Raphael M. Reischuk, and Pawel Szalachowski. The SCION Internet architecture. *Communications of the ACM*, 60(6):56–65, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217735/fulltext.

Liu:2017:DWF

[2300] Yili Liu and Lina Zhou. The dynamics of work-family conflict. *Communications of the ACM*, 60(6):66–70, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/6/217736/fulltext.

Bau:2017:LPB

[2301] David Bau, Jeff Gray, Caitlin Kelleher, Josh Sheldon, and Franklyn Turbak. Learnable programming: blocks and beyond. *Communications of the ACM*, 60(6):72–80, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/6/217743/fulltext`.

Malik:2017:TPW

[2302] Jitendra Malik. Technical perspective: What led computer vision to deep learning? *Communications of the ACM*, 60(6):82–83, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/6/217744/fulltext`.

Krizhevsky:2017:ICD

[2303] Alex Krizhevsky, Ilya Sutskever, and Geoffrey E. Hinton. ImageNet classification with deep convolutional neural networks. *Communications of the ACM*, 60(6):84–90, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/6/217745/fulltext`.

Wigderson:2017:TPL

[2304] Avi Wigderson. Technical perspective: Low-depth arithmetic circuits. *Communications of the ACM*, 60(6):91, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/6/217747/fulltext`.

Gupta:2017:UPL

[2305] Ankit Gupta, Pritish Kamath, Neeraj Kayal, and Ramprasad Saptharishi. Unexpected power of low-depth arithmetic circuits. *Communications of the ACM*, 60(6):93–100, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/6/217746/fulltext`.

Hoffmann:2017:LBE

[2306] Leah Hoffmann. Last byte: This is for everyone. *Communications of the ACM*, 60(6):104–ff, June 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/6/217737/fulltext`.

Chien:2017:ELT

[2307] Andrew A. Chien. Editor's letter: Today's *Communications of the ACM*. *Communications of the ACM*, 60(7): 5, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/7/218868/fulltext`.

Cerf:2017:CBF

[2308] Vinton G. Cerf. Cerf's up: A brittle and fragile future. *Communications of the ACM*, 60(7):7, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/7/218867/fulltext`.

Guzdial:2017:BGC

[2309] Mark Guzdial. BLOG@CACM: 'Generation CS' drives growth in enrollments. *Communications of the ACM*, 60(7):10–11, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218874/fulltext.

Savage:2017:NBB

[2310] Neil Savage. News: Building a brain may mean going analog. *Communications of the ACM*, 60(7):13–15, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218861/fulltext.

Greengard:2017:NCCb

[2311] Samuel Greengard. News: Cracking the code on DNA storage. *Communications of the ACM*, 60(7):16–18, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218859/fulltext.

Anthes:2017:NAI

[2312] Gary Anthes. News: Artificial intelligence poised to ride a new wave. *Communications of the ACM*, 60(7):19–21, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218862/fulltext.

Fisher:2017:NJS

[2313] Lawrence M. Fisher. News: Jean E. Sammet 1928–2017. *Communications of the ACM*, 60(7):22, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218860/fulltext.

Young:2017:PSC

[2314] Adam L. Young and Moti Yung. Privacy and security: Cryptovirology: the birth, neglect, and explosion of ransomware. *Communications of the ACM*, 60(7):24–26, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218875/fulltext.

Greenwood:2017:EBD

[2315] Brad Greenwood, Gordon Burtch, and Seth Carnahan. Economic and business dimensions: Unknowns of the gig-economy. *Communications of the ACM*, 60(7):27–29, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218863/fulltext.

Denning:2017:PIB

[2316] Peter J. Denning. The profession of IT: The beginner's creed. *Communications of the ACM*, 60(7):30–31, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218869/fulltext.

Snir:2017:VIG

[2317] Marc Snir. Viewpoint: The informal guide to ACM Fellow nominations. *Communications of the ACM*, 60(7):32–34, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http:

//cacm.acm.org/magazines/2017/7/218870/fulltext.

Helland:2017:SEF

[2318] Pat Helland. Side effects, front and center. *Communications of the ACM*, 60(7):36–39, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218871/fulltext.

Overton:2017:IG

[2319] Mark A. Overton. The IDAR graph. *Communications of the ACM*, 60(7):40–45, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218873/fulltext.

Bailis:2017:RPTa

[2320] Peter Bailis, Peter Alvaro, and Sumit Gulwani. Research for practice: tracing and debugging distributed systems; programming by examples. *Communications of the ACM*, 60(7):46–49, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218872/fulltext.

Harrell:2017:RAD

[2321] D. Fox Harrell and Chong-U Lim. Reimagining the avatar dream: modeling social identity in digital media. *Communications of the ACM*, 60(7):50–61, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218864/fulltext.

Koutroumpis:2017:HII

[2322] Pantelis Koutroumpis, Aija Leiponen, and Llewellyn D. W. Thomas. How important is IT? *Communications of the ACM*, 60(7):62–68, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218865/fulltext.

Nekipelov:2017:IAD

[2323] Denis Nekipelov and Tammy Wang. Inference and auction design in online advertising. *Communications of the ACM*, 60(7):70–79, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218880/fulltext.

Schneider:2017:ISP

[2324] Fred B. Schneider. IronFleet simplifies proving safety and liveness properties: technical perspective. *Communications of the ACM*, 60(7):82, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218879/fulltext.

Hawblitzel:2017:IPS

[2325] Chris Hawblitzel, Jon Howell, Manos Kapritsos, Jacob R. Lorch, Bryan Parno, Michael L. Roberts, Srinath Setty, and Brian Zill. IronFleet: proving safety and liveness of practical distributed systems. *Communications of the ACM*, 60(7):83–92, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.

acm.org/magazines/2017/7/218876/fulltext.

Mitzenmacher:2017:BBH

[2326] Michael Mitzenmacher. Building a better hash function: technical perspective. *Communications of the ACM*, 60(7):93, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218877/fulltext.

Thorup:2017:FPH

[2327] Mikkel Thorup. Fast and powerful hashing using tabulation. *Communications of the ACM*, 60(7):94–101, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218878/fulltext.

Shasha:2017:LBR

[2328] Dennis Shasha. Last byte: Ruby risks. *Communications of the ACM*, 60(7):104, July 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/7/218866/fulltext.

Chien:2017:ELB

[2329] Andrew A. Chien. Editor's letter: Building the future: Communications of the ACM. *Communications of the ACM*, 60(8):5, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3121002.

Cerf:2017:CPU

[2330] Vinton G. Cerf. Cerf's up: In praise of under-specification? *Communications of the ACM*, 60(8):7, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3110531.

Staff:2017:LEE

[2331] CACM Staff. Letters to the Editor: Embed ethical guidelines in autonomous weapons. *Communications of the ACM*, 60(8):8–9, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3117849.

Guo:2017:BHA

[2332] Philip Guo. BLOG@CACM: How adults ages 60+ are learning to code. *Communications of the ACM*, 60(8):10–11, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3105421.

Shein:2017:NHP

[2333] Esther Shein. News: Hacker-proof coding. *Communications of the ACM*, 60(8):12–14, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3105423.

Kugler:2017:NWV

[2334] Logan Kugler. News: Why virtual reality will transform a workplace near you. *Communications of the ACM*, 60(8):15–17, August

2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3105444.

Kirkpatrick:2017:NAC

[2335] Keith Kirkpatrick. News: AI in contact centers. *Communications of the ACM*, 60(8):18–19, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3105442.

Fisher:2017:NCP

[2336] Lawrence M. Fisher. News: Charles P. 'Chuck' Thacker: 1943–2017. *Communications of the ACM*, 60(8):20–21, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3107180.

Anderson:2017:HRP

[2337] David P. Anderson. Historical reflections: Prophets, seers, and pioneers. *Communications of the ACM*, 60(8):22–25, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3108926.

Wang:2017:EUE

[2338] Jennifer Wang. Education: Is the U.S. education system ready for CS for all? *Communications of the ACM*, 60(8):26–28, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3108928.

Neville-Neil:2017:KVO

[2339] George V. Neville-Neil. Kode Vicious: The observer effect. *Communications of the ACM*, 60(8):29–30, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3108930.

Horsman:2017:VNS

[2340] Dominic Horsman, Vivien Kendon, and Susan Stepney. Viewpoint: The natural science of computing. *Communications of the ACM*, 60(8):31–34, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=3107924.

Olenewa:2017:NWC

[2341] Ricardo Olenewa, Gary M. Olson, Judith S. Olson, and Daniel M. Russell. Now that we can write simultaneously, how do we use that to our advantage? *Communications of the ACM*, 60(8):36–43, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://dl.acm.org/ft_gateway.cfm?id=2983527.

Boehm:2017:SDC

[2342] Hans-J. Boehm. Small-data computing: correct calculator arithmetic. *Communications of the ACM*, 60 (8):44–49, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Corry:2017:TPW

[2343] Leo Corry. Turing's pre-war analog computers: the fatherhood of the modern computer revisited. *Communications of the ACM*, 60(8):50–58, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://dl.acm.org/ft_gateway.cfm?id=3104032`.

Cao:2017:DSC

[2344] Longbing Cao. Data science: challenges and directions. *Communications of the ACM*, 60(8):59–68, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://dl.acm.org/ft_gateway.cfm?id=3015456`.

Heule:2017:SBF

[2345] Marijn J. H. Heule and Oliver Kullmann. The science of brute force. *Communications of the ACM*, 60(8):70–79, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://dl.acm.org/ft_gateway.cfm?id=3107239`.

Shapiro:2017:UCT

[2346] Marc Shapiro. Unexpected connections: technical perspective. *Communications of the ACM*, 60(8):82, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://dl.acm.org/ft_gateway.cfm?id=3068768`.

Clements:2017:SCR

[2347] Austin T. Clements, M. Frans Kaashoek, Eddie Kohler, Robert T. Morris, and Nickolai Zeldovich. The scalable commutativity rule: designing scalable software for multicore processors. *Communications of the ACM*, 60(8):83–90, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://dl.acm.org/ft_gateway.cfm?id=3068914`.

Pottmann:2017:LFF

[2348] Helmut Pottmann. Linking form, function, and fabrication: technical perspective. *Communications of the ACM*, 60(8):91, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://dl.acm.org/ft_gateway.cfm?id=3068903`.

Bacher:2017:SIO

[2349] Moritz Bächer, Bernd Bickel, Emily Whiting, and Olga Sorkine-Hornung. Spin-it: optimizing moment of inertia for spinnable objects. *Communications of the ACM*, 60(8):92–99, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://dl.acm.org/ft_gateway.cfm?id=3068766`.

Clegg:2017:LBT

[2350] Brian Clegg. Last byte: Turing's taxi. *Communications of the ACM*, 60(8):104–ff, August 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://dl.acm.org/ft_gateway.cfm?id=3107917`.

Garfinkel:2017:LUT

[2351] Simson Garfinkel, Jeanna Matthews, Stuart S. Shapiro, and Jonathan M. Smith. Letter from USACM: Toward algorithmic transparency and accountability. *Communications of the ACM*, 60(9):5, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http:`

//cacm.acm.org/magazines/2017/9/220423/fulltext.

Cerf:2017:CTT

[2352] Vinton G. Cerf. Cerf's up: Take two aspirin and call me in the morning. *Communications of the ACM*, 60(9):6, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220419/fulltext.

Vardi:2017:VID

[2353] Moshe Y. Vardi. Vardi's insights: Divination by program committee. *Communications of the ACM*, 60(9):7, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220429/fulltext.

Staff:2017:LECb

[2354] CACM Staff. Letters to the Editor: Computational thinking is not necessarily computational. *Communications of the ACM*, 60(9):8–9, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220430/fulltext.

Hill:2017:BAS

[2355] Robin K. Hill. BLOG@CACM: Assuring software quality by preventing neglect. *Communications of the ACM*, 60(9):10–11, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220431/fulltext.

Greengard:2017:NAA

[2356] Samuel Greengard. News: It's all about image. *Communications of the ACM*, 60(9):13–15, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220432/fulltext.

Mone:2017:NBM

[2357] Gregory Mone. News: Broadband to Mars. *Communications of the ACM*, 60(9):16–17, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220434/fulltext.

Kugler:2017:NWG

[2358] Logan Kugler. News: Why GPS spoofing is a threat to companies, countries. *Communications of the ACM*, 60(9):18–19, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220436/fulltext.

Fisher:2017:NTL

[2359] Lawrence M. Fisher. News: Turing laureates celebrate award's 50th anniversary. *Communications of the ACM*, 60(9):20–23, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220435/fulltext.

Fisher:2017:NCW

[2360] Lawrence M. Fisher. News: Charles W. Bachman: 1924–2017. *Communications of the ACM*, 60(9):24–25, September 2017. CODEN CACMA2.

ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220433/fulltext.

Reidenberg:2017:LTD

[2361] Joel R. Reidenberg. Law and technology: Digitocracy. *Communications of the ACM*, 60(9):26–28, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220437/fulltext.

Salge:2017:CES

[2362] Carolina Alves de Lima Salge and Nicholas Berente. Computing ethics: Is that social bot behaving unethically? *Communications of the ACM*, 60(9):29–31, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220438/fulltext.

Denning:2017:PIMb

[2363] Peter J. Denning. The profession of IT: Multitasking without thrashing. *Communications of the ACM*, 60(9):32–34, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220424/fulltext.

Convertino:2017:VWA

[2364] Gregorio Convertino and Nancy Frishberg. Viewpoint: Why agile teams fail without UX research. *Communications of the ACM*, 60(9):35–37, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220421/fulltext.

Conway:2017:VWD

[2365] Andrew Conway and Peter Eckersley. Viewpoint: When does law enforcement's demand to read your data become a demand to read your mind? *Communications of the ACM*, 60(9):38–40, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220420/fulltext.

Treynor:2017:CSA

[2366] Ben Treynor, Mike Dahlin, Vivek Rau, and Betsy Beyer. The calculus of service availability. *Communications of the ACM*, 60(9):42–47, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220426/fulltext.

Cormode:2017:DS

[2367] Graham Cormode. Data sketching. *Communications of the ACM*, 60(9):48–55, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220427/fulltext.

Matsudaira:2017:WBI

[2368] Kate Matsudaira. 10 ways to be a better interviewer. *Communications of the ACM*, 60(9):56–58, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.

acm.org/magazines/2017/9/220425/fulltext.

Schoenick:2017:MBT

[2369] Carissa Schoenick, Peter Clark, Oyvind Tafjord, Peter Turney, and Oren Etzioni. Moving beyond the Turing Test with the Allen AI Science Challenge. *Communications of the ACM*, 60(9):60–64, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220439/fulltext.

Brandtzaeg:2017:TDO

[2370] Petter Bae Brandtzaeg and Asbjørn Følstad. Trust and distrust in online fact-checking services. *Communications of the ACM*, 60(9):65–71, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220440/fulltext.

Peisert:2017:SHP

[2371] Sean Peisert. Security in high-performance computing environments. *Communications of the ACM*, 60(9):72–80, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220422/fulltext.

Thacker:2017:TPG

[2372] Charles (Chuck) Thacker. Technical perspective: a gloomy look at the integrity of hardware. *Communications of the ACM*, 60(9):82, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220441/fulltext.

Yang:2017:EAP

[2373] Kaiyuan Yang, Matthew Hicks, Qing Dong, Todd Austin, and Dennis Sylvester. Exploiting the analog properties of digital circuits for malicious hardware. *Communications of the ACM*, 60(9):83–91, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220443/fulltext.

Chi:2017:TPH

[2374] Ed H. Chi. Technical perspective: Humans and computers working together on hard tasks. *Communications of the ACM*, 60(9):92, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220442/fulltext.

Lasecki:2017:SDI

[2375] Walter S. Lasecki, Christopher D. Miller, Iftekhar Naim, Raja Kushalnagar, Adam Sadilek, Daniel Gildea, and Jeffrey P. Bigham. Scribe: deep integration of human and machine intelligence to caption speech in real time. *Communications of the ACM*, 60(9):93–100, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/9/220418/fulltext.

Hoffmann:2017:LBA

[2376] Leah Hoffmann. Last byte: All the pretty pictures. *Communications of the ACM*, 60(9):104–ff, September 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/9/220428/fulltext`.

Chien:2017:ELC

[2377] Andrew A. Chien. Editor's letter: Computing is a profession. *Communications of the ACM*, 60 (10):5, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/10/221313/fulltext`.

Cerf:2017:ELS

[2378] Vinton G. Cerf. Editor's letter: Six education. *Communications of the ACM*, 60(10):7, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/10/221312/fulltext`.

Staff:2017:LEB

[2379] CACM Staff. Letters to the Editor: Beyond brute force. *Communications of the ACM*, 60(10): 8–9, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/10/221321/fulltext`.

Hill:2017:BMW

[2380] Robin K. Hill and Mark Guzdial. BLOG@CACM: Manipulating word representations, and preparing students for coding jobs? *Communications of the ACM*, 60(10): 12–13, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/10/221327/fulltext`.

Kirkpatrick:2017:NPH

[2381] Keith Kirkpatrick. News: 3D-printing human body parts. *Communications of the ACM*, 60(10): 15–17, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/10/221323/fulltext`.

Monroe:2017:NDH

[2382] Don Monroe. News: Digital hearing. *Communications of the ACM*, 60 (10):18–20, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/10/221324/fulltext`.

Edwards:2017:NPD

[2383] Chris Edwards. News: Portable device fears show power of social development. *Communications of the ACM*, 60(10):21–22, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/10/221325/fulltext`.

Cusumano:2017:TSMb

[2384] Michael A. Cusumano. Technology strategy and management: Amazon and whole foods: follow the strategy (and the money). *Communications of the ACM*, 60(10):

24–26, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221314/fulltext.

Parnas:2017:IRR

[2385] David Lorge Parnas. Inside risks: The real risks of artificial intelligence. *Communications of the ACM*, 60(10):27–31, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221330/fulltext.

Dhar:2017:EBD

[2386] Vasant Dhar and Roger M. Stein. Economic and business dimensions: FinTech platforms and strategy. *Communications of the ACM*, 60(10):32–35, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221331/fulltext.

Neville-Neil:2017:KVI

[2387] George V. Neville-Neil. Kode vicious: IoT: the Internet of Terror. *Communications of the ACM*, 60(10):36–37, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221328/fulltext.

Chapman:2017:VWC

[2388] Roderick Chapman, Neil White, and Jim Woodcock. Viewpoint: What can agile methods bring to high-integrity software development? *Communications of the ACM*, 60(10):38–41, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221329/fulltext.

Videla:2017:MWC

[2389] Alvaro Videla. Metaphors we compute by. *Communications of the ACM*, 60(10):42–45, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221316/fulltext.

Bailis:2017:RPTb

[2390] Peter Bailis, Tawanna Dillahunt, Stefanie Mueller, and Patrick Baudisch. Research for practice: technology for underserved communities; personal fabrication. *Communications of the ACM*, 60(10):46–49, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221317/fulltext.

Limoncelli:2017:FWM

[2391] Thomas A. Limoncelli. Four ways to make CS and IT more immersive. *Communications of the ACM*, 60(10):50–52, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221315/fulltext.

Tempero:2017:BR

[2392] Ewan Tempero, Tony Gorschek, and Lefteris Angelis. Barriers to refactoring. *Communications of the ACM*, 60(10):54–61, October 2017. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221318/fulltext.

Gewald:2017:MAT

[2393] Heiko Gewald, Xuequn Wang, Andy Weeger, Mahesh S. Raisinghani, Gerald Grant, Otavio Sanchez, and Siddhi Pittayachawan. Millennials' attitudes toward IT consumerization in the workplace. *Communications of the ACM*, 60(10):62–69, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221319/fulltext.

Wicker:2017:IAT

[2394] Stephen B. Wicker and Kolbeinn Karlsson. Internet advertising: technology, ethics, and a serious difference of opinion. *Communications of the ACM*, 60(10):70–79, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221320/fulltext.

Naughton:2017:BDQ

[2395] Jeffrey F. Naughton. Broadening and deepening query optimization yet still making progress: technical perspective. *Communications of the ACM*, 60(10):80, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221310/fulltext.

Trummer:2017:MOP

[2396] Immanuel Trummer and Christoph Koch. Multi-objective parametric query optimization. *Communications of the ACM*, 60(10):81–89, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221322/fulltext.

Foster:2017:SNL

[2397] Jeffrey S. Foster. Shedding new light on an old language debate: technical perspective. *Communications of the ACM*, 60(10):90, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221309/fulltext.

Ray:2017:LSS

[2398] Baishakhi Ray, Daryl Posnett, Premkumar Devanbu, and Vladimir Filkov. A large-scale study of programming languages and code quality in GitHub. *Communications of the ACM*, 60(10):91–100, October 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/10/221326/fulltext.

Williams:2017:DHA

[2399] Laurie Williams and Doug Baldwin. Departments: Highlights of the ACM student research competition. *Communications of the ACM*, 60(11):5, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222162/fulltext.

Cerf:2017:CHL

[2400] Vinton G. Cerf. Cerf's up: Heidelberg laureate forum. *Communica-*

tions of the ACM, 60(11):6, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222179/fulltext.

Vardi:2017:VIW

[2401] Moshe Y. Vardi. Vardi's insights: Would Turing have won the Turing award? *Communications of the ACM*, 60(11):7, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222163/fulltext.

Staff:2017:LETb

[2402] CACM Staff. Letters to the Editor: They see what you see. *Communications of the ACM*, 60(11):8–9, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222161/fulltext.

Kobayashi:2017:BOW

[2403] Mei Kobayashi. BLOG@CACM: Opportunities for women, minorities in information retrieval. *Communications of the ACM*, 60(11):10–11, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222164/fulltext.

Savage:2017:NBO

[2404] Neil Savage. News: A block on the old chip. *Communications of the ACM*, 60(11):12–14, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222175/fulltext.

Wright:2017:NCS

[2405] Alex Wright. News: Censoring sensors. *Communications of the ACM*, 60(11):15–16, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222174/fulltext.

Shein:2017:NOD

[2406] Esther Shein. News: Overcoming disabilities. *Communications of the ACM*, 60(11):17–19, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222173/fulltext.

Samuelson:2017:LSD

[2407] Pamela Samuelson. Legally speaking: Disgorging profits in design patent cases. *Communications of the ACM*, 60(11):20–22, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222165/fulltext.

Barocas:2017:CEE

[2408] Solon Barocas and Danah Boyd. Computing ethics: Engaging the ethics of data science in practice. *Communications of the ACM*, 60(11):23–25, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222176/fulltext.

Connor:2017:EKM

[2409] Richard Connor, Quintin Cutts, and Judy Robertson. Education: Keeping the machinery in computing education. *Communications of the ACM*, 60 (11):26–28, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/11/222181/fulltext`.

Spann:2017:VPW

[2410] Martin Spann, Lucas Stich, and Klaus M. Schmidt. Viewpoint: Pay what you want as a pricing model for open access publishing? *Communications of the ACM*, 60(11): 29–31, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/11/222177/fulltext`.

Dignum:2017:VSA

[2411] Virginia Dignum. Viewpoint: Social agents: bridging simulation and engineering. *Communications of the ACM*, 60(11):32–34, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/11/222178/fulltext`.

Staff:2017:HPR

[2412] CACM Staff. Hootsuite: in pursuit of reactive systems. *Communications of the ACM*, 60(11): 36–43, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/11/222167/fulltext`.

Matsudaira:2017:BD

[2413] Kate Matsudaira. Breadth and depth. *Communications of the ACM*, 60(11): 44–45, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/11/222168/fulltext`.

Jacobson:2017:TSM

[2414] Ivar Jacobson, Ian Spence, and Pan-Wei Ng. Is there a single method for the Internet of Things? *Communications of the ACM*, 60(11): 46–53, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/11/222166/fulltext`.

Odamaki:2017:CRC

[2415] Makoto Odamaki and Shree K. Nayar. Cambits: a reconfigurable camera system. *Communications of the ACM*, 60 (11):54–61, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/11/222170/fulltext`.

Mcilroy:2017:URT

[2416] Stuart Mcilroy, Weiyi Shang, Nasir Ali, and Ahmed E. Hassan. User reviews of top mobile apps in Apple and Google app stores. *Communications of the ACM*, 60(11): 62–67, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://cacm.acm.org/magazines/2017/11/222169/fulltext`.

Riek:2017:HR

[2417] Laurel D. Riek. Healthcare robotics. *Communications of the ACM*, 60(11): 68–78, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222171/fulltext.

Silver:2017:SII

[2418] David Silver. Solving imperfect information games: technical perspective. *Communications of the ACM*, 60(11):80, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222184/fulltext.

Bowling:2017:HLH

[2419] Michael Bowling, Neil Burch, Michael Johanson, and Oskari Tammelin. Heads-up limit hold'em poker is solved. *Communications of the ACM*, 60(11): 81–88, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222180/fulltext.

Alexa:2017:EKG

[2420] Marc Alexa. Exploring a kingdom by geodesic measures: technical perspective. *Communications of the ACM*, 60(11):89, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222182/fulltext.

Crane:2017:HMD

[2421] Keenan Crane, Clarisse Weischedel, and Max Wardetzky. The heat method for distance computation. *Communications of the ACM*, 60(11): 90–99, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222183/fulltext.

Shostak:2017:LBB

[2422] Seth Shostak. Last byte: Butterfly effect. *Communications of the ACM*, 60(11):112, November 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2017/11/222172/fulltext.

Chien:2017:CSI

[2423] Andrew A. Chien. Computing is the secret ingredient (well, not so secret). *Communications of the ACM*, 60(12):5, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223040-computing-is-the-secret-ingredient-well-not-so-secret.

Staff:2017:SCS

[2424] CACM Staff. Start CS students off with industry best practices. *Communications of the ACM*, 60(12):6, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223052-start-cs-students-off-with-industry-best-practices.

Cerf:2017:CNS

[2425] Vinton G. Cerf. Cerf's up: Now for something entirely different. *Communications of the ACM*, 60

(12):7, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2017/12/223053-now-for-something-entirely-different`.

Guo:2017:BTH

[2426] Philip Guo. Building tools to help students learn to program. *Communications of the ACM*, 60(12): 8–9, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2017/12/223041-building-tools-to-help-students-learn-to-program`.

Monroe:2017:PBS

[2427] Don Monroe. Perovskites boost solar-cell potential. *Communications of the ACM*, 60(12):11–13, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2017/12/223055-perovskites-boost-solar-cell-potential`.

Greengard:2017:GML

[2428] Samuel Greengard. Gaming machine learning. *Communications of the ACM*, 60(12):14–16, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2017/12/223056-gaming-machine-learning`.

Kirkpatrick:2017:PCT

[2429] Keith Kirkpatrick. Parallel computational thinking. *Communications of the ACM*, 60(12):17–19, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2017/12/223054-parallel-computational-thinking`.

Denning:2017:FE

[2430] Peter J. Denning. The forgotten engineer. *Communications of the ACM*, 60 (12):20–23, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2017/12/223061-the-forgotten-engineer`.

Lyon:2017:CCR

[2431] Louise Ann Lyon and Jill Denner. Community colleges: A resource for increasing equity and inclusion in computer science education. *Communications of the ACM*, 60(12): 24–26, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2017/12/223049-community-colleges`.

Neville-Neil:2017:CHC

[2432] George V. Neville-Neil. Cold, hard cache. *Communications of the ACM*, 60(12):27–28, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2017/12/223062-cold-hard-cache`.

Andriole:2017:DBS

[2433] Stephen J. Andriole. The death of big software. *Communications of the ACM*, 60(12):29–32, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2017/12/223060-the-death-of-big-software`.

Davis:2017:LAL

[2434] Ernest Davis. Lousy advice to the lovelorn. *Communications of the ACM*, 60(12):33–35, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223050-lousy-advice-to-the-lovelorn.

Narayanan:2017:BAP

[2435] Arvind Narayanan and Jeremy Clark. Bitcoin's academic pedigree. *Communications of the ACM*, 60(12): 36–45, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223058-bitcoins-academic-pedigree.

Helland:2017:XJL

[2436] Pat Helland. XML and JSON are like cardboard. *Communications of the ACM*, 60(12):46–47, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223059-xml-and-json-are-like-cardboard.

Regehr:2017:RPV

[2437] John Regehr and Peter Bailis. Research for practice: Vigorous public debates in academic computer science. *Communications of the ACM*, 60 (12):48–50, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223057-research-for-practice.

Hellman:2017:TLC

[2438] Martin E. Hellman. Turing Lecture: Cybersecurity, nuclear security, Alan Turing, and illogical logic. *Communications of the ACM*, 60(12): 52–59, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223042-cybersecurity-nuclear-security-alan-turing-and-illogical-logic.

Montealegre:2017:TDC

[2439] Ramiro Montealegre and Wayne F. Cascio. Technology-driven changes in work and employment. *Communications of the ACM*, 60(12): 60–67, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223043-technology-driven-changes-in-work-and-employment.

Pinto:2017:EEN

[2440] Gustavo Pinto and Fernando Castor. Energy efficiency: A new concern for application software developers. *Communications of the ACM*, 60 (12):68–75, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223044-energy-efficiency.

Roth:2017:TPP

[2441] Aaron Roth. Technical perspective: Pricing information (and its implications). *Communications of the ACM*, 60(12):78, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https:/

/cacm.acm.org/magazines/2017/12/223048-technical-perspective-pricing-information-and-its-implications.

Li:2017:TPP

[2442] Chao Li, Daniel Yang Li, Gerome Miklau, and Dan Suciu. A theory of pricing private data. *Communications of the ACM*, 60(12):79–86, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223045-a-theory-of-pricing-private-data.

Larus:2017:TPS

[2443] James Larus. Technical perspective: A simple, elegant approach to non-numeric parallelization. *Communications of the ACM*, 60(12):87, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223047-technical-perspective-a-simple-elegant-approach-to-non-numeric-parallelization.

Campanoni:2017:AAN

[2444] Simone Campanoni, Kevin Brownell, Svilen Kanev, Timothy M. Jones, Gu-Yeon Wei, and David Brooks. Automatically accelerating non-numerical programs by architecture-compiler co-design. *Communications of the ACM*, 60(12):88–97, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223046-automatically-accelerating-non-numerical-programs-by-architecture-compiler-co-design.

Hoffmann:2017:LBG

[2445] Leah Hoffmann. Last byte: Grooming the leaders of tomorrow. *Communications of the ACM*, 60(12):112, 111, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2017/12/223051-grooming-the-leaders-of-tomorrow.

Cerf:2018:CRA

[2446] Vinton G. Cerf. Cerf's up: The role of archives in digital preservation. *Communications of the ACM*, 61(1):7, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223880/fulltext.

Vardi:2018:VIC

[2447] Moshe Y. Vardi. Vardi's insights: Computer professionals for social responsibility. *Communications of the ACM*, 61(1):9, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223881/fulltext.

Staff:2018:LEL

[2448] CACM Staff. Letters to the editor: A leap from artificial to intelligence. *Communications of the ACM*, 61(1):10–11, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223890/fulltext.

Nelson:2018:BBI

[2449] Mark R. Nelson. BLOG@CACM: The big IDEA and the PD pipeline. *Communications of the ACM*, 61(1):12–13, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223873/fulltext.

Mone:2018:NFS

[2450] Gregory Mone. News: Feeling sounds, hearing sights. *Communications of the ACM*, 61(1):15–17, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223884/fulltext.

Wright:2018:NSS

[2451] Alex Wright. News: Smartphone science. *Communications of the ACM*, 61(1):18–20, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223882/fulltext.

Krakovsky:2018:NNJ

[2452] Marina Krakovsky. News: The new jobs. *Communications of the ACM*, 61(1):21–23, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223883/fulltext.

Cusumano:2018:TSMa

[2453] Michael A. Cusumano. Technology strategy and management: The sharing economy meets reality. *Communications of the ACM*, 61(1):26–28, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223874/fulltext.

Marsden:2018:LTH

[2454] Chris Marsden. Law and technology: How law and computer science can work together to improve the information society. *Communications of the ACM*, 61(1):29–31, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223875/fulltext.

Haigh:2018:HRD

[2455] Thomas Haigh. Historical reflections: Defining American greatness: IBM from Watson to Trump. *Communications of the ACM*, 61(1):32–37, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223891/fulltext.

Lucas:2018:VTF

[2456] Henry C. Lucas, Jr. Viewpoint: Technology and the failure of the university. *Communications of the ACM*, 61(1):38–41, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223893/fulltext.

Baral:2018:VAW

[2457] Chitta Baral, Shih-Fu Chang, Brian Curless, Partha Dasgupta, Julia Hirschberg, and Anita Jones. Viewpoint: Ask not what your post-doc can do for you .... *Communications of the ACM*, 61(1):42–44, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223892/fulltext.

Alappatt:2018:NAI

[2458] Antony Alappatt. Network applications are interactive. *Communications of the ACM*, 61(1):46–53, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223886/fulltext.

Alvaro:2018:AGF

[2459] Peter Alvaro and Severine Tymon. Abstracting the geniuses away from failure testing. *Communications of the ACM*, 61(1):54–61, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223887/fulltext.

Loveless:2018:CMI

[2460] Jacob Loveless. Cache me if you can. *Communications of the ACM*, 61(1):62–68, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223885/fulltext.

Coscia:2018:PSH

[2461] Michele Coscia. Popularity spikes hurt future chances for viral propagation of protomemes. *Communications of the ACM*, 61(1):70–77, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223889/fulltext.

Subramanian:2018:DBB

[2462] Hemang Subramanian. Decentralized blockchain-based electronic marketplaces. *Communications of the ACM*, 61(1):78–84, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223888/fulltext.

Mazurczyk:2018:IHC

[2463] Wojciech Mazurczyk and Steffen Wendzel. Information hiding: challenges for forensic experts. *Communications of the ACM*, 61(1):86–94, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223894/fulltext.

Parkes:2018:MST

[2464] David C. Parkes. Moving spectrum: technical perspective. *Communications of the ACM*, 61(1):96, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223876/fulltext.

Newman:2018:DOS

[2465] Neil Newman, Alexandre Fréchette, and Kevin Leyton-Brown. Deep optimization for spectrum repacking. *Communications of the ACM*, 61(1):97–104, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.

acm.org/magazines/2018/1/223878/fulltext.

Chakravarty:2018:CHP

[2466] Manuel Chakravarty. Can high performance be portable?: technical perspective. *Communications of the ACM*, 61(1):105, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223879/fulltext.

Ragan-Kelley:2018:HDA

[2467] Jonathan Ragan-Kelley, Andrew Adams, Dillon Sharlet, Connelly Barnes, Sylvain Paris, Marc Levoy, Saman Amarasinghe, and Frédo Durand. Halide: decoupling algorithms from schedules for high-performance image processing. *Communications of the ACM*, 61 (1):106–115, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223877/fulltext.

Shasha:2018:LBP

[2468] Dennis Shasha. Last byte: Polychromatic choreography. *Communications of the ACM*, 61(1):120, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223895/fulltext.

Gotterbarn:2018:ACE

[2469] Don Gotterbarn, Amy Bruckman, Catherine Flick, Keith Miller, and Marty J. Wolf. ACM code of ethics and professional conduct: ACM code of ethics: a guide for positive action. *Communications of the ACM*, 61 (1):121–128, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://cacm.acm.org/magazines/2018/1/223896/fulltext.

Tims:2018:CAW

[2470] Jodi L. Tims. From the chair of ACM-W: Achieving gender equity: ACM-W can't do it alone. *Communications of the ACM*, 61(2):5, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/2/224620/fulltext.

Cerf:2018:CCS

[2471] Vinton G. Cerf. Cerf's up: A comprehensive self-driving car test. *Communications of the ACM*, 61(2):7, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/2/224621/fulltext.

Staff:2018:LETa

[2472] CACM Staff. Letters to the editor: Toward an equation that anticipates AI risks. *Communications of the ACM*, 61(2):8–9, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/2/224622/fulltext.

Arquilla:2018:BPP

[2473] John Arquilla and Mark Guzdial. BLOG@CACM: Protecting the power grid, and finding bias in student evaluations. *Communications of the ACM*, 61(2):10–11, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224623/fulltext`.

Edwards:2018:NQT

[2474] Chris Edwards. News: Quantum technology forgoes unconditional security to extend its reach. *Communications of the ACM*, 61(2):12–14, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224624/fulltext`.

Savage:2018:NGS

[2475] Neil Savage. News: Going serverless. *Communications of the ACM*, 61(2):15–16, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224625/fulltext`.

Kugler:2018:NWV

[2476] Logan Kugler. News: The war over the value of personal data. *Communications of the ACM*, 61(2):17–19, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224626/fulltext`.

Fu:2018:IRR

[2477] Kevin Fu and Wenyuan Xu. Inside risks: Risks of trusting the physics of sensors. *Communications of the ACM*, 61(2):20–23, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224627/fulltext`.

Wille:2018:EIA

[2478] Sarah Wille and Daphne Sajous-Brady. Education: The inclusive and accessible workplace. *Communications of the ACM*, 61(2):24–26, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224628/fulltext`.

Neville-Neil:2018:KVR

[2479] George V. Neville-Neil. Kode vicious: Reducing the attack surface. *Communications of the ACM*, 61(2):27–28, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224629/fulltext`.

Keating:2018:VTA

[2480] Jennifer Keating and Illah Nourbakhsh. Viewpoint: Teaching artificial intelligence and humanity. *Communications of the ACM*, 61(2):29–32, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224630/fulltext`.

Greenstein:2018:VIE

[2481] Shane Greenstein. Viewpoint: Innovation from the edges. *Communications of the ACM*, 61(2):33–36, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224631/fulltext`.

Leung:2018:TIC

[2482] Andrew Leung, Andrew Spyker, and Tim Bozarth. Titus: introducing containers to the Netflix cloud. *Communications of the ACM*, 61(2):38–45, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224632/fulltext`.

Kwon:2018:RPP

[2483] Albert Kwon, James R. Wilcox, and Peter Bailis. Research for practice: private online communication; highlights in systems verification. *Communications of the ACM*, 61(2):46–49, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224633/fulltext`.

Matsudaira:2018:VT

[2484] Kate Matsudaira. Views from the top. *Communications of the ACM*, 61(2):50–52, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224634/fulltext`.

Zysman:2018:NPD

[2485] John Zysman and Martin Kenney. The next phase in the digital revolution: intelligent tools, platforms, growth, employment. *Communications of the ACM*, 61(2):54–63, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224635/fulltext`.

Stavova:2018:LSC

[2486] Vlasta Stavova, Lenka Dedkova, Martin Ukrop, and Vashek Matyas. A large-scale comparative study of beta testers and regular users. *Communications of the ACM*, 61(2):64–71, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224636/fulltext`.

Michail:2018:ETD

[2487] Othon Michail and Paul G. Spirakis. Elements of the theory of dynamic networks. *Communications of the ACM*, 61(2):72, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224637/fulltext`.

Zdancewic:2018:BBF

[2488] Steve Zdancewic. Building bug-free compilers: technical perspective. *Communications of the ACM*, 61(2):83, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224638/fulltext`.

Lopes:2018:PVP

[2489] Nuno P. Lopes, David Menendez, Santosh Nagarakatte, and John Regehr. Practical verification of peephole optimizations with Alive. *Communications of the ACM*, 61(2):84–91, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/2/224639/fulltext`.

Conitzer:2018:DAF

[2490] Vincent Conitzer. Designing algorithms and the fairness criteria they should satisfy: technical perspective.

Communications of the ACM, 61(2): 92, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/2/224640/fulltext.

Gal:2018:WFR

[2491] Kobi Gal, Ariel D. Procaccia, Moshe Mash, and Yair Zick. Which is the fairest (rent division) of them all? *Communications of the ACM*, 61(2): 93–100, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/2/224641/fulltext.

Batchelor:2018:LBW

[2492] David Allen Batchelor. Last byte: Welcome to the singularity. *Communications of the ACM*, 61(2):104–ff, February 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/2/224642/fulltext.

Chien:2018:ELH

[2493] Andrew A. Chien. Editor's letter: Here comes everybody ... to *Communications*. *Communications of the ACM*, 61(3):5, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225479/fulltext.

Cerf:2018:CUC

[2494] Vinton G. Cerf. Cerf's up: Unintended consequences. *Communications of the ACM*, 61(3):7, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225485/fulltext.

Vardi:2018:VID

[2495] Moshe Y. Vardi. Vardi's insights: A declaration of the dependence of cyberspace. *Communications of the ACM*, 61(3):9, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225477/fulltext.

Staff:2018:LEK

[2496] CACM Staff. Letters to the Editor: Keep the ACM Code of Ethics as it is. *Communications of the ACM*, 61(3):10–11, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225481/fulltext.

Guzdial:2018:BCP

[2497] Mark Guzdial and Bertrand Meyer. BLOG@CACM: The costs and pleasures of a computer science teacher. *Communications of the ACM*, 61 (3):12–13, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225478/fulltext.

Greengard:2018:NPV

[2498] Samuel Greengard. News: In pursuit of virtual life. *Communications of the ACM*, 61(3):15–17, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225465/fulltext.

Kirkpatrick:2018:NCI

[2499] Keith Kirkpatrick. News: The construction industry in the 21st century. *Communications of the ACM*, 61(3):18–20, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225464/fulltext.

Shein:2018:NSF

[2500] Esther Shein. News: The state of fakery. *Communications of the ACM*, 61(3):21–23, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225466/fulltext.

Anderson:2018:PSM

[2501] Ross Anderson. Privacy and security: Making security sustainable. *Communications of the ACM*, 61(3):24–26, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225467/fulltext.

Samuelson:2018:LSW

[2502] Pamela Samuelson. Legally speaking: Will the Supreme Court nix reviews of bad patents? *Communications of the ACM*, 61(3):27–29, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225468/fulltext.

Rogerson:2018:CEE

[2503] Simon Rogerson. Computing ethics: Ethics omission increases gases emission. *Communications of the ACM*, 61(3):30–32, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225482/fulltext.

Denning:2018:PIC

[2504] Peter J. Denning. The profession of IT: The computing profession. *Communications of the ACM*, 61(3):33–35, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225469/fulltext.

Schneider:2018:VIP

[2505] Fred B. Schneider. Viewpoint: Impediments with policy interventions to foster cybersecurity. *Communications of the ACM*, 61(3):36–38, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225483/fulltext.

Silberman:2018:VRR

[2506] M. S. Silberman, B. Tomlinson, R. LaPlante, J. Ross, L. Irani, and A. Zaldivar. Viewpoint: Responsible research with crowds: pay crowdworkers at least minimum wage. *Communications of the ACM*, 61(3):39–41, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225476/fulltext.

Wallach:2018:VCS

[2507] Hanna Wallach. Viewpoint: Computational social science $\neq$ computer science + social data. *Communications of the ACM*, 61(3):42–44, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225484/fulltext.

Sompolinsky:2018:BUI

[2508] Yonatan Sompolinsky and Aviv Zohar. Bitcoin's underlying incentives. *Communications of the ACM*, 61(3):46–53, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225472/fulltext.

Limoncelli:2018:OEA

[2509] Thomas A. Limoncelli. Operational excellence in April Fools' pranks. *Communications of the ACM*, 61(3):54–57, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225471/fulltext.

Schlossnagle:2018:MDW

[2510] Theo Schlossnagle. Monitoring in a DevOps world. *Communications of the ACM*, 61(3):58–61, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225470/fulltext.

Felleisen:2018:PPL

[2511] Matthias Felleisen, Robert Bruce Findler, Matthew Flatt, Shriram Krishnamurthi, Eli Barzilay, Jay McCarthy, and Sam Tobin-Hochstadt. A programmable programming language. *Communications of the ACM*, 61(3):62–71, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225475/fulltext.

Knowles:2018:WOT

[2512] Bran Knowles and Vicki L. Hanson. The wisdom of older technology (non)users. *Communications of the ACM*, 61(3):72–77, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225474/fulltext.

Gorschek:2018:ETS

[2513] Tony Gorschek. Evolution toward soft(er) products. *Communications of the ACM*, 61(3):78–84, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225473/fulltext.

Kuipers:2018:HCW

[2514] Benjamin Kuipers. How can we trust a robot? *Communications of the ACM*, 61(3):86–95, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225480/fulltext.

Immorlica:2018:GTF

[2515] Nicole Immorlica. A graph-theoretic framework traces task planning: technical perspective. *Communications of the ACM*, 61(3):98, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225488/fulltext.

Kleinberg:2018:TIP

[2516] Jon Kleinberg and Sigal Oren. Time-inconsistent planning: a computational problem in behavioral economics. *Communications of the ACM*, 61(3):99–107, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225487/fulltext.

Paterson:2018:HHB

[2517] Kenny Paterson. On Heartbleed: a hard beginnyng makth a good endyng John Heywood (1497–1580): technical perspective. *Communications of the ACM*, 61(3):108, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225486/fulltext.

Zhang:2018:ASC

[2518] Liang Zhang, David Choffnes, Tudor Dumitras, Dave Levin, Alan Mislove, Aaron Schulman, and Christo Wilson. Analysis of SSL certificate reissues and revocations in the wake of Heartbleed. *Communications of the ACM*, 61(3):109–116, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225489/fulltext.

Hoffmann:2018:LBN

[2519] Leah Hoffmann. Last byte: The network effect. *Communications of the ACM*, 61(3):120–ff, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/3/225490/fulltext.

Chien:2018:DEL

[2520] Andrew A. Chien. Department: Editor's letter: Go big! *Communications of the ACM*, 61(4):5, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226360/fulltext.

Cerf:2018:DEL

[2521] Vinton G. Cerf. Department: Editor's letter: The sound of programming. *Communications of the ACM*, 61(4):6, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226379/fulltext.

Vardi:2018:DOA

[2522] Moshe Y. Vardi. Departments: Open access and ACM. *Communications of the ACM*, 61(4):7, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226357/fulltext.

Staff:2018:LEP

[2523] CACM Staff. Letters to the editor: Predicting failure of the university. *Communications of the ACM*, 61(4):8–9, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226358/fulltext.

Tims:2018:BFI

[2524] Jodi Tims and Daniel A. Reed. BLOG@CACM: Fostering inclusion, keeping the net neutral. *Communications of the ACM*, 61(4):10–11, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.

acm.org/magazines/2018/4/226361/fulltext.

Savage:2018:NAB

[2525] Neil Savage. News: Always out of balance. *Communications of the ACM*, 61(4):12–14, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226376/fulltext.

Monroe:2018:NCA

[2526] Don Monroe. News: Chips for artificial intelligence. *Communications of the ACM*, 61(4):15–17, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226374/fulltext.

Krakovsky:2018:NAE

[2527] Marina Krakovsky. News: Artificial (emotional) intelligence. *Communications of the ACM*, 61(4):18–19, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226375/fulltext.

Sako:2018:TSM

[2528] Mari Sako. Technology strategy and management: Business ecosystems: how do they matter for innovation? *Communications of the ACM*, 61(4):20–22, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226362/fulltext.

Neville-Neil:2018:KVP

[2529] George V. Neville-Neil. Kode vicious: Popping kernels. *Communications of the ACM*, 61(4):23–24, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226359/fulltext.

Jacobson:2018:VPV

[2530] Sheldon H. Jacobson. Viewpoint: Push versus pull. *Communications of the ACM*, 61(4):25–27, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226364/fulltext.

Wicker:2018:VSC

[2531] Stephen B. Wicker. Viewpoint: Smartphones, contents of the mind, and the Fifth Amendment. *Communications of the ACM*, 61(4):28–31, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226363/fulltext.

Forsgren:2018:DD

[2532] Nicole Forsgren. DevOps delivers. *Communications of the ACM*, 61(4):32–33, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226367/fulltext.

Humble:2018:CDS

[2533] Jez Humble. Continuous delivery sounds great, but will it work here? *Communications of the ACM*, 61(4):34–39, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317

(electronic). URL https://cacm.acm.org/magazines/2018/4/226365/fulltext.

Kromhout:2018:CWF

[2534] Bridget Kromhout. Containers will not fix your broken culture (and other hard truths). *Communications of the ACM*, 61(4):40–43, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226368/fulltext.

Forsgren:2018:DM

[2535] Nicole Forsgren and Mik Kersten. DevOps metrics. *Communications of the ACM*, 61(4):44–48, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226366/fulltext.

Gasco-Hernandez:2018:BSC

[2536] Mila Gascó-Hernandez. Building a smart city: lessons from Barcelona. *Communications of the ACM*, 61(4):50–57, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226370/fulltext.

Sadowski:2018:LBS

[2537] Caitlin Sadowski, Edward Aftandilian, Alex Eagle, Liam Miller-Cushon, and Ciera Jaspan. Lessons from building static analysis tools at Google. *Communications of the ACM*, 61(4):58–66, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226371/fulltext.

Berman:2018:RPD

[2538] Francine Berman, Rob Rutenbar, Brent Hailpern, Henrik Christensen, Susan Davidson, Deborah Estrin, Michael Franklin, Margaret Martonosi, Padma Raghavan, Victoria Stodden, and Alexander S. Szalay. Realizing the potential of data science. *Communications of the ACM*, 61(4):67–72, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226372/fulltext.

Guri:2018:BAG

[2539] Mordechai Guri and Yuval Elovici. Bridgeware: the air-gap malware. *Communications of the ACM*, 61(4):74–82, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226377/fulltext.

Blei:2018:EPM

[2540] David M. Blei. Expressive probabilistic models and scalable method of moments: technical perspective. *Communications of the ACM*, 61(4):84, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226369/fulltext.

Arora:2018:LTM

[2541] Sanjeev Arora, Rong Ge, Yoni Halpern, David Mimno, Ankur Moitra, David Sontag, Yichen Wu, and Michael Zhu. Learning topic models — provably and efficiently. *Communications of the ACM*, 61(4):85–93, April 2018.

CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226373/fulltext.

Shasha:2018:LBF

[2542] Dennis Shasha. Last byte: Finding October. *Communications of the ACM*, 61(4):96–ff, April 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/4/226378/fulltext.

Cerf:2018:CTT

[2543] Vinton G. Cerf. Cerf's up: Turing test 2. *Communications of the ACM*, 61(5):5, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227198/fulltext.

Davidson:2018:ETS

[2544] Jack Davidson, Joseph Konstan, Andrew A. Chien, and Scott Delman. Editorial: Toward sustainable access: where are we now? *Communications of the ACM*, 61(5):6–7, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227199/fulltext.

Vardi:2018:VIHa

[2545] Moshe Y. Vardi. Vardi's insights: How we lost the women in computing. *Communications of the ACM*, 61(5):9, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227192/fulltext.

Staff:2018:AEA

[2546] CACM Staff. ACM's election: ACM's 2018 general election: please take this opportunity to vote. *Communications of the ACM*, 61(5):13–21, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227200/fulltext.

Staff:2018:LEG

[2547] CACM Staff. Letters to the editor: Get ACM (and *Communications*) out of politics. *Communications of the ACM*, 61(5):20–11, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227196/fulltext.

Torres:2018:BCC

[2548] Edwin Torres and Walid Saba. BLOG@CACM: Commenting on code, considering data's bottleneck. *Communications of the ACM*, 61(5):24–25, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227201/fulltext.

Mone:2018:NSM

[2549] Gregory Mone. News: Shrinking machines, cellular computers. *Communications of the ACM*, 61(5):26–28, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227204/fulltext.

Savage:2018:NUF

[2550] Neil Savage. News: Using functions for easier programming. *Communications of the ACM*, 61(5):29–30, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227202/fulltext.

Greengard:2018:NFH

[2551] Samuel Greengard. News: Finding a healthier approach to managing medical data. *Communications of the ACM*, 61(5):31–33, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227203/fulltext.

Calo:2018:LTL

[2552] Ryan Calo. Law and technology: Is the law ready for driverless cars? *Communications of the ACM*, 61(5):34–36, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227187/fulltext.

Schneider:2018:PSP

[2553] Fred B. Schneider. Privacy and security: Putting trust in security engineering. *Communications of the ACM*, 61(5):37–39, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227205/fulltext.

Repenning:2018:ESF

[2554] Alexander Repenning. Education: Scale or fail. *Communications of the ACM*, 61(5):40–42, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227197/fulltext.

HaroldB:2018:VMB

[2555] Harold "Bud" Lawson. Viewpoint: The march into the black hole of complexity. *Communications of the ACM*, 61(5):43–45, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227182/fulltext.

Martonosi:2018:VSP

[2556] Margaret Martonosi. Viewpoint: Science, policy, and service. *Communications of the ACM*, 61(5):46–48, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227183/fulltext.

Schwarzkopf:2018:RPC

[2557] Malte Schwarzkopf and Peter Bailis. Research for practice: cluster scheduling for datacenters. *Communications of the ACM*, 61(5):50–53, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227184/fulltext.

Davidovic:2018:CAS

[2558] Stepán Davidovic and Betsy Beyer. Canary analysis service. *Communications of the ACM*, 61(5):54–62, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227185/fulltext.

Matsudaira:2018:HYW

[2559] Kate Matsudaira. How is your week going so far? *Communications of the ACM*, 61(5):63–64, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/5/227186/fulltext`.

Tenenberg:2018:MTC

[2560] Josh Tenenberg, Wolff-Michael Roth, Donald Chinn, Alfredo Jornet, David Socha, and Skip Walter. More than the code: learning rules of rejection in writing programs. *Communications of the ACM*, 61(5):66–71, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/5/227188/fulltext`.

Brooks:2018:IFW

[2561] Richard R. Brooks, Lu Yu, Yu Fu, Oluwakemi Hambolu, John Gaynard, Julie Owono, Archippe Yepmou, and Felix Blanc. Internet freedom in West Africa: technical support for journalists and democracy advocates. *Communications of the ACM*, 61(5):72–82, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/5/227189/fulltext`.

Wang:2018:DAV

[2562] Xiaonan Wang. Data acquisition in vehicular ad hoc networks. *Communications of the ACM*, 61(5):83–88, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/5/227190/fulltext`.

Schuller:2018:SER

[2563] Björn W. Schuller. Speech emotion recognition: two decades in a nutshell, benchmarks, and ongoing trends. *Communications of the ACM*, 61(5):90–99, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/5/227191/fulltext`.

Etzioni:2018:TPB

[2564] Oren Etzioni. Technical perspective: Breaking the mold of machine learning. *Communications of the ACM*, 61(5):102, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/5/227194/fulltext`.

Mitchell:2018:NEL

[2565] T. Mitchell, W. Cohen, E. Hruschka, P. Talukdar, B. Yang, J. Betteridge, A. Carlson, B. Dalvi, M. Gardner, B. Kisiel, J. Krishnamurthy, N. Lao, K. Mazaitis, T. Mohamed, N. Nakashole, E. Platanios, A. Ritter, M. Samadi, B. Settles, R. Wang, D. Wijaya, A. Gupta, X. Chen, A. Saparov, M. Greaves, and J. Welling. Never-ending learning. *Communications of the ACM*, 61(5):103–115, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/5/227193/fulltext`.

MacLeod:2018:LBF

[2566] Ken MacLeod. Last byte: Free press. *Communications of the ACM*, 61(5): 120–ff, May 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/5/227195/fulltext.

Cerf:2018:CCE

[2567] Vinton G. Cerf. Cerf's up: Celebrating excellence. *Communications of the ACM*, 61(6):5, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228043/fulltext.

Staff:2018:LEW

[2568] CACM Staff. Letters to the editor: When to hold 'em. *Communications of the ACM*, 61(6):6–7, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228026/fulltext.

Guzdial:2018:BPP

[2569] Mark Guzdial and Susan Landau. BLOG@CACM: Programming programming languages, and analyzing Facebook's failure. *Communications of the ACM*, 61(6):8–9, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228045/fulltext.

Savage:2018:NRR

[2570] Neil Savage. News: Rewarded for RISC. *Communications of the ACM*, 61(6):10–12, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228029/fulltext.

Edwards:2018:NDL

[2571] Chris Edwards. News: Deep learning hunts for signals among the noise. *Communications of the ACM*, 61(6): 13–14, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228030/fulltext.

Kirkpatrick:2018:NSP

[2572] Keith Kirkpatrick. News: 3D sensors provide security, better games. *Communications of the ACM*, 61(6):15–17, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228031/fulltext.

Kugler:2018:NGH

[2573] Logan Kugler. News: Getting hooked on tech. *Communications of the ACM*, 61(6):18–19, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228032/fulltext.

Weaver:2018:IRR

[2574] Nicholas Weaver. Inside risks: Risks of cryptocurrencies. *Communications of the ACM*, 61(6):20–24, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228046/fulltext.

Denning:2018:PII

[2575] Peter J. Denning. The profession of IT: An interview with Dave Parnas. *Communications of the ACM*, 61(6):25–27, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/6/228033/fulltext`.

Neville-Neil:2018:KVW

[2576] George V. Neville-Neil. Kode vicious: Watchdogs vs. snowflakes. *Communications of the ACM*, 61(6):28–29, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/6/228037/fulltext`.

LeGoues:2018:VEA

[2577] C. Le Goues, Y. Brun, S. Apel, E. Berger, S. Khurshid, and Y. Smaragdakis. Viewpoint: Effectiveness of anonymization in double-blind review. *Communications of the ACM*, 61(6):30–33, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/6/228027/fulltext`.

Choudhury:2018:DCS

[2578] Diptanu Gon Choudhury and Timothy Perrett. Designing cluster schedulers for Internet-scale services. *Communications of the ACM*, 61(6):34–40, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/6/228038/fulltext`.

Lauinger:2018:TSD

[2579] Tobias Lauinger, Abdelberi Chaabane, and Christo B. Wilson. Thou shalt not depend on me. *Communications of the ACM*, 61(6):41–47, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/6/228039/fulltext`.

Limoncelli:2018:DA

[2580] Thomas A. Limoncelli. Documentation is automation. *Communications of the ACM*, 61(6):48–53, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/6/228040/fulltext`.

Baeza-Yates:2018:BW

[2581] Ricardo Baeza-Yates. Bias on the web. *Communications of the ACM*, 61(6):54–61, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/6/228035/fulltext`.

Wobbrock:2018:ABD

[2582] Jacob O. Wobbrock, Krzysztof Z. Gajos, Shaun K. Kane, and Gregg C. Vanderheiden. Ability-based design. *Communications of the ACM*, 61(6):62–71, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/6/228034/fulltext`.

Gefen:2018:IPM

[2583] David Gefen, Jake Miller, Johnathon Kyle Armstrong, Frances H. Cornelius, Noreen Robertson, Aaron Smith-McLallen, and Jennifer A. Taylor. Identifying patterns in medical records through latent semantic analysis. *Communications of the ACM*, 61(6):72–77, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228036/fulltext.

Genkin:2018:PDC

[2584] Daniel Genkin, Dimitrios Papadopoulos, and Charalampos Papamanthou. Privacy in decentralized cryptocurrencies. *Communications of the ACM*, 61(6):78–88, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228028/fulltext.

Cox:2018:TPM

[2585] Landon P. Cox. Technical perspective: Measuring optimization potential with Coz. *Communications of the ACM*, 61(6):90, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228041/fulltext.

Curtsinger:2018:CFC

[2586] Charlie Curtsinger and Emery D. Berger. Coz: finding code that counts with causal profiling. *Communications of the ACM*, 61(6):91–99, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228044/fulltext.

Hoffmann:2018:LBRa

[2587] Leah Hoffmann. Last byte: RISC management. *Communications of the ACM*, 61(6):104–ff, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/6/228042/fulltext.

Hanson:2018:DRM

[2588] Vicki L. Hanson. Departments: Reflections on my two years. *Communications of the ACM*, 61(7):5, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229040/fulltext.

Cerf:2018:CNN

[2589] Vinton G. Cerf. Cerf's up: On neural networks. *Communications of the ACM*, 61(7):7, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229041/fulltext.

Vardi:2018:VIHb

[2590] Moshe Y. Vardi. Vardi's insights: How the hippies destroyed the Internet. *Communications of the ACM*, 61(7):9, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229042/fulltext.

Staff:2018:LETb

[2591] CACM Staff. Letters to the editor: Teach the law (and the AI) 'foreseeability'. *Communications of the ACM*, 61(7):10–11, July 2018. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229043/fulltext.

Bugayenko:2018:BWD

[2592] Yegor Bugayenko. BLOG@CACM: We are done with 'hacking'. *Communications of the ACM*, 61(7):12–13, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229044/fulltext.

Kugler:2018:NWC

[2593] Logan Kugler. News: Why cryptocurrencies use so much energy: and what to do about it. *Communications of the ACM*, 61(7):15–17, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229045/fulltext.

Anthes:2018:NYG

[2594] Gary Anthes. News: You've got mail! *Communications of the ACM*, 61(7):18–19, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229047/fulltext.

Kirkpatrick:2018:NBI

[2595] Keith Kirkpatrick. News: Bringing the Internet to the (developing) world. *Communications of the ACM*, 61(7):20–21, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229046/fulltext.

Samuelson:2018:LSC

[2596] Pamela Samuelson. Legally speaking: Copyright blocks a news-monitoring technology. *Communications of the ACM*, 61(7):24–26, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229048/fulltext.

Halaburda:2018:EBD

[2597] Hanna Halaburda. Economic and business dimensions: Blockchain revolution without the blockchain? *Communications of the ACM*, 61(7):27–29, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229049/fulltext.

Ahmed:2018:BPB

[2598] Alex Ahmed. Broadening participation: Beyond diversity. *Communications of the ACM*, 61(7):30–32, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229050/fulltext.

Yasar:2018:VNP

[2599] Osman Yasar. Viewpoint: A new perspective on computational thinking. *Communications of the ACM*, 61(7):33–39, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/7/229035/fulltext.

Dykstra:2018:VCD

[2600] Josiah Dykstra and Eugene H. Spafford. Viewpoint: The case for disappearing cyber security. *Communications of the ACM*, 61(7):40–42, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/7/229051/fulltext`.

Chisnall:2018:CLL

[2601] David Chisnall. C is not a low-level language. *Communications of the ACM*, 61(7):44–48, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/7/229036/fulltext`.

Matsudaira:2018:HCG

[2602] Kate Matsudaira. How to come up with great ideas. *Communications of the ACM*, 61(7):49–51, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/7/229037/fulltext`.

Vasisht:2018:RPT

[2603] Deepak Vasisht and Peter Bailis. Research for practice: toward a network of connected things. *Communications of the ACM*, 61(7):52–54, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/7/229038/fulltext`.

Goodfellow:2018:MML

[2604] Ian Goodfellow, Patrick McDaniel, and Nicolas Papernot. Making machine learning robust against adversarial inputs. *Communications of the ACM*, 61(7):56–66, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/7/229030/fulltext`.

Schneider:2018:DNG

[2605] Christoph Schneider, Markus Weinmann, and Jan vom Brocke. Digital nudging: guiding online user choices through interface design. *Communications of the ACM*, 61(7):67–73, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/7/229029/fulltext`.

Ousterhout:2018:AMO

[2606] John Ousterhout. Always measure one level deeper. *Communications of the ACM*, 61(7):74–83, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/7/229031/fulltext`.

Bellini:2018:AED

[2607] Carlo Gabriel Porto Bellini. The ABCs of effectiveness in the digital society. *Communications of the ACM*, 61(7):84–91, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/7/229032/fulltext`.

Goldberg:2018:RSM

[2608] Sharon Goldberg and Ethan Heilman. The rewards of selfish mining: technical perspective. *Communications of the ACM*, 61(7):94, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/7/229034/fulltext`.

Eyal:2018:MEB

[2609] Ittay Eyal and Emin Gün Sirer. Majority is not enough: Bitcoin mining is vulnerable. *Communications of the ACM*, 61(7):95–102, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/7/229033/fulltext`.

Shasha:2018:LBS

[2610] Dennis Shasha. Last byte: String wars. *Communications of the ACM*, 61(7):104, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/7/229039/fulltext`.

Larus:2018:IEA

[2611] James Larus and Chris Hankin. Informatics Europe and ACM Europe Council: Regulating automated decision making. *Communications of the ACM*, 61(8):5, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229770/fulltext`.

Cerf:2018:CT

[2612] Vinton G. Cerf. Cerf's up: Traceability. *Communications of the ACM*, 61(8):7, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229771/fulltext`.

Staff:2018:LEE

[2613] CACM Staff. Letters to the editor: Encourage ACM to address U.S. election integrity. *Communications of the ACM*, 61(8):10–11, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229772/fulltext`.

Hill:2018:BAR

[2614] Robin K. Hill. BLOG@CACM: Assessing responsibility for program output. *Communications of the ACM*, 61(8):12–13, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229773/fulltext`.

Edwards:2018:NAT

[2615] Chris Edwards. News: Animals teach robots to find their way. *Communications of the ACM*, 61(8):14–16, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229775/fulltext`.

Monroe:2018:NEL

[2616] Don Monroe. News: Electronics are leaving the plane. *Communications of the ACM*, 61(8):17–18, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229776/fulltext`.

Shein:2018:NBP

[2617] Esther Shein. News: Broadening the path for women in STEM. *Communications of the ACM*, 61(8):19–

21, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/8/229774/fulltext.

Ali:2018:GCD

[2618] Kashif Ali and Kurtis Heimerl. Global computing: Designing sustainable rural infrastructure through the lens of OpenCellular. *Communications of the ACM*, 61(8):22–25, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/8/229756/fulltext.

Guzdial:2018:EPE

[2619] Mark Guzdial and Amy Bruckman. Education: Providing equitable access to computing education. *Communications of the ACM*, 61(8):26–28, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/8/229757/fulltext.

Neville-Neil:2018:KVE

[2620] George V. Neville-Neil. Kode vicious: Every silver lining has a cloud. *Communications of the ACM*, 61(8):29–30, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/8/229758/fulltext.

Shapiro:2018:PCD

[2621] Ehud Shapiro. Pointg/counterpoint: democracy and e-democracy: Point: foundations of e-democracy. *Communications of the ACM*, 61(8):31–34, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/8/229759/fulltext.

Schuler:2018:PCD

[2622] Douglas Schuler. Point/counterpoint: democracy and e-democracy: Counterpoint: e-democracy won't save democracy. democracy will save democracy. *Communications of the ACM*, 61(8):34–36, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/8/229760/fulltext.

Petrov:2018:ABM

[2623] Alex Petrov. Algorithms behind modern storage systems. *Communications of the ACM*, 61(8):38–44, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/8/229762/fulltext.

Crankshaw:2018:RPP

[2624] Dan Crankshaw, Joseph Gonzalez, and Peter Bailis. Research for practice: prediction-serving systems. *Communications of the ACM*, 61(8):45–49, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/8/229761/fulltext.

Helland:2018:CE

[2625] Pat Helland. Consistently eventual. *Communications of the ACM*, 61(8):50–52, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/8/229763/fulltext.

Burton:2018:HTC

[2626] Emanuelle Burton, Judy Goldsmith, and Nicholas Mattei. How to teach computer ethics through science fiction. *Communications of the ACM*, 61(8):54–64, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229765/fulltext`.

Delimitrou:2018:ALT

[2627] Christina Delimitrou and Christos Kozyrakis. Amdahl's law for tail latency. *Communications of the ACM*, 61(8):65–72, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229764/fulltext`.

Such:2018:MPS

[2628] Jose M. Such and Natalia Criado. Multiparty privacy in social media. *Communications of the ACM*, 61(8):74–81, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229766/fulltext`.

Owens:2018:TPG

[2629] John D. Owens. Technical perspective: Graphs, betweenness centrality, and the GPU. *Communications of the ACM*, 61(8):84, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229767/fulltext`.

McLaughlin:2018:AGB

[2630] Adam McLaughlin and David A. Bader. Accelerating GPU betweenness centrality. *Communications of the ACM*, 61(8):85–92, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229768/fulltext`.

Bainbridge:2018:LBD

[2631] William Sims Bainbridge. Last byte: Deadlock. *Communications of the ACM*, 61(8):96–ff, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/8/229769/fulltext`.

Best:2018:GCS

[2632] Michael L. Best. Global computing: Session details: Global computing. *Communications of the ACM*, 61(8):??, August 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chien:2018:ELC

[2633] Andrew A. Chien. Editor's letter: Computer architecture: disruption from above. *Communications of the ACM*, 61(9):5, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/9/230558/fulltext`.

Cerf:2018:CPW

[2634] Vinton G. Cerf. Cerf's up: The Peace of Westphalia. *Communications of the ACM*, 61(9):6, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL

https://cacm.acm.org/magazines/2018/9/230559/fulltext.

Vardi:2018:VIM

[2635] Moshe Y. Vardi. Vardi's insights: Move fast and break things. *Communications of the ACM*, 61(9):7, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230560/fulltext.

Staff:2018:LEHa

[2636] CACM Staff. Letters to the editor: Hippie values really did build the Internet. *Communications of the ACM*, 61(9):9–11, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230561/fulltext.

Bugayenko:2018:BDB

[2637] Yegor Bugayenko. BLOG@CACM: Discovering bugs, or ensuring success? *Communications of the ACM*, 61(9):12–13, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230562/fulltext.

Monroe:2018:NAH

[2638] Don Monroe. News: AI holds the better hand. *Communications of the ACM*, 61(9):14–16, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230565/fulltext.

Mone:2018:NRI

[2639] Gregory Mone. News: Robotic implants. *Communications of the ACM*, 61(9):17–18, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230564/fulltext.

Kirkpatrick:2018:NBC

[2640] Keith Kirkpatrick. News: Borders in the cloud. *Communications of the ACM*, 61(9):19–21, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230563/fulltext.

Wagner:2018:CEO

[2641] Alan R. Wagner, Jason Borenstein, and Ayanna Howard. Computing ethics: Overtrust in the robotic age. *Communications of the ACM*, 61(9):22–24, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230593/fulltext.

Pasquale:2018:LTW

[2642] Frank Pasquale. Law and technology: When machine learning is facially invalid. *Communications of the ACM*, 61(9):25–27, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230569/fulltext.

Denning:2018:PIN

[2643] Peter J. Denning. The profession of IT: Navigating with accelerating technology change. *Communications of the ACM*, 61(9):28–30, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL

https://cacm.acm.org/magazines/2018/9/230594/fulltext.

Barker:2018:VAO

[2644] Adam Barker. Viewpoint: An academic's observations from a sabbatical at Google. *Communications of the ACM*, 61(9):31–33, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230596/fulltext.

Lee:2018:VSR

[2645] Edward A. Lee. Viewpoint: Is software the result of top-down intelligent design or evolution? *Communications of the ACM*, 61(9):34–36, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230595/fulltext.

Limoncelli:2018:GPM

[2646] Thomas A. Limoncelli. GitOps: a path to more self-service IT. *Communications of the ACM*, 61(9):38–42, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230599/fulltext.

Mubeen:2018:WFS

[2647] Noor Mubeen. Workload frequency scaling law: derivation and verification. *Communications of the ACM*, 61(9):43–47, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230598/fulltext.

Alonso:2018:RPF

[2648] Gustavo Alonso and Peter Bailis. Research for practice: FPGAs in datacenters. *Communications of the ACM*, 61(9):48–49, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230597/fulltext.

Jouppi:2018:DSA

[2649] Norman P. Jouppi, Cliff Young, Nishant Patil, and David Patterson. A domain-specific architecture for deep neural networks. *Communications of the ACM*, 61(9):50–59, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230571/fulltext.

Perricone:2018:CBC

[2650] Robert Perricone, X. Sharon Hu, Joseph Nahas, and Michael Niemier. Can beyond-CMOS devices illuminate dark silicon? *Communications of the ACM*, 61(9):60–69, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230600/fulltext.

Vucetic:2018:PAC

[2651] Slobodan Vucetic, Ashis Kumar Chanda, Shanshan Zhang, Tian Bai, and Aniruddha Maiti. Peer assessment of CS doctoral programs shows strong correlation with faculty citations. *Communications of the ACM*, 61(9):70–76, September 2018. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230572/fulltext.

Abadi:2018:ODD

[2652] Daniel J. Abadi and Jose M. Faleiro. An overview of deterministic database systems. *Communications of the ACM*, 61(9):78–88, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230601/fulltext.

Choudhury:2018:TPY

[2653] Romit Roy Choudhury. Technical perspective: Is your WiFi a sensor? *Communications of the ACM*, 61(9):90, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230574/fulltext.

Zhao:2018:ERU

[2654] Mingmin Zhao, Fadel Adib, and Dina Katabi. Emotion recognition using wireless signals. *Communications of the ACM*, 61(9):91–100, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230573/fulltext.

Shasha:2018:LBB

[2655] Dennis Shasha. Last byte: Bounce blockchain. *Communications of the ACM*, 61(9):104–ff, September 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/9/230602/fulltext.

Cerf:2018:CIS

[2656] Vinton G. Cerf. Cerf's up: The Internet in the 21st century. *Communications of the ACM*, 61(10):5, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231357/fulltext.

Staff:2018:LEHb

[2657] CACM Staff. Letters to the editor: Hennessy and Patterson on the roots of RISC. *Communications of the ACM*, 61(10):6–7, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231358/fulltext.

Banifatemi:2018:BCW

[2658] Amir Banifatemi. BLOG@CACM: Can we use AI for global good? *Communications of the ACM*, 61(10):8–9, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231359/fulltext.

Edwards:2018:NFV

[2659] Chris Edwards. News: Floating voxels provide new hope for 3D displays. *Communications of the ACM*, 61(10):11–13, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231361/fulltext.

Greengard:2018:NTE

[2660] Samuel Greengard. News: Transient electronics take shape. *Communications of the ACM*, 61(10):

14–16, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231362/fulltext.

Shein:2018:NDA

[2661] Esther Shein. News: The dangers of automating social programs. *Communications of the ACM*, 61 (10):17–19, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231360/fulltext.

Cusumano:2018:TSMb

[2662] Michael A. Cusumano. Technology strategy and management: The business of quantum computing. *Communications of the ACM*, 61(10): 20–22, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231363/fulltext.

Swire:2018:PSP

[2663] Peter Swire. Privacy and security: A pedagogic cybersecurity framework. *Communications of the ACM*, 61(10):23–26, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231364/fulltext.

Neville-Neil:2018:KVO

[2664] George V. Neville-Neil. Kode vicious: The obscene coupling known as spaghetti code. *Communications of the ACM*, 61(10):27–28, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231365/fulltext.

Abramatic:2018:VBU

[2665] Jean-François Abramatic, Roberto Di Cosmo, and Stefano Zacchiroli. Viewpoint: Building the universal archive of source code. *Communications of the ACM*, 61(10):29–31, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231366/fulltext.

Cabot:2018:VCC

[2666] Jordi Cabot, Javier Luis Cánovas Izquierdo, and Valerio Cosentino. Viewpoint: Are CS conferences (too) closed communities? *Communications of the ACM*, 61(10): 32–34, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231367/fulltext.

Lipton:2018:MMI

[2667] Zachary C. Lipton. The mythos of model interpretability. *Communications of the ACM*, 61(10): 36–43, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231369/fulltext.

Matsudaira:2018:SFC

[2668] Kate Matsudaira. The secret formula for choosing the right next role. *Communications of the ACM*, 61(10):44–46, October 2018. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231370/fulltext.

Helland:2018:MYS

[2669] Pat Helland. Mind your state for your state of mind. *Communications of the ACM*, 61(10):47–54, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231368/fulltext.

Darwiche:2018:HLI

[2670] Adnan Darwiche. Human-level intelligence or animal-like abilities? *Communications of the ACM*, 61 (10):56–67, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231373/fulltext.

Klein:2018:FVS

[2671] Gerwin Klein, June Andronick, Matthew Fernandez, Ihor Kuz, Toby Murray, and Gernot Heiser. Formally verified software in the real world. *Communications of the ACM*, 61(10):68–77, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231372/fulltext.

Bui:2018:PPH

[2672] Quang "Neo" Bui, Sean Hansen, Manlu Liu, and Qiang (John) Tu. The productivity paradox in health information technology. *Communications of the ACM*, 61(10):78–85, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231371/fulltext.

Nardi:2018:CWL

[2673] Bonnie Nardi, Bill Tomlinson, Donald J. Patterson, Jay Chen, Daniel Pargman, Barath Raghavan, and Birgit Penzenstadler. Computing within limits. *Communications of the ACM*, 61(10):86–93, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231374/fulltext.

Baillieul:2018:CTV

[2674] John Baillieul. A control theorist's view on reactive control for autonomous drones: technical perspective. *Communications of the ACM*, 61(10):95, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231378/fulltext.

Mottola:2018:FCR

[2675] Luca Mottola and Kamin Whitehouse. Fundamental concepts of reactive control for autonomous drones. *Communications of the ACM*, 61(10):96–104, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231377/fulltext.

Snir:2018:FMT

[2676] Marc Snir. The future of MPI: technical perspective. *Communications of the ACM*, 61(10):105, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL

https://cacm.acm.org/magazines/2018/10/231376/fulltext.

Gerstenberger:2018:EHS

[2677] Robert Gerstenberger, Maciej Besta, and Torsten Hoefler. Enabling highly scalable remote memory access programming with MPI-3 one sided. *Communications of the ACM*, 61(10): 106–113, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231375/fulltext.

Hoffmann:2018:LBRb

[2678] Leah Hoffmann. Last byte: Reaping the benefits of a diverse background. *Communications of the ACM*, 61(10):120–ff, October 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/10/231379/fulltext.

Cerf:2018:CUL

[2679] Vinton G. Cerf. Cerf's up: The upper layers of the internet. *Communications of the ACM*, 61(11):5, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232189/fulltext.

Vardi:2018:DSR

[2680] Moshe Y. Vardi. Departments: Self-reference and section 230. *Communications of the ACM*, 61(11):7, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232190/fulltext.

Hewitt:2018:GCM

[2681] Carl Hewitt and Vijay Kumar. The gap in CS, mulling irrational exuberance. *Communications of the ACM*, 61(11):8–9, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232191/fulltext.

Monroe:2018:NAE

[2682] Don Monroe. News: AI, explain yourself. *Communications of the ACM*, 61 (11):11–13, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232193/fulltext.

Savage:2018:NNM

[2683] Neil Savage. News: A new movement in seismology. *Communications of the ACM*, 61(11):14–15, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232194/fulltext.

Greengard:2018:NWI

[2684] Samuel Greengard. News: Weighing the impact of GDPR. *Communications of the ACM*, 61(11): 16–18, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232192/fulltext.

Samuelson:2018:LSE

[2685] Pamela Samuelson. Legally speaking: The EU's controversial digital single market directive. *Communications of the ACM*, 61(11):

20–23, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232195/fulltext.

Bellovin:2018:IRB

[2686] Steven M. Bellovin and Peter G. Neumann. Inside risks: The big picture. *Communications of the ACM*, 61 (11):24–26, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232196/fulltext.

Shapiro:2018:EHM

[2687] R. Benjamin Shapiro, Rebecca Fiebrink, and Peter Norvig. Education: How machine learning impacts the undergraduate computing curriculum. *Communications of the ACM*, 61(11): 27–29, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232197/fulltext.

Liaskos:2018:VUS

[2688] C. Liaskos, A. Tsioliaridou, A. Pitsillides, S. Ioannidis, and I. Akyildiz. Viewpoint: Using any surface to realize a new paradigm for wireless communications. *Communications of the ACM*, 61(11):30–33, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232200/fulltext.

Lahtiranta:2018:VCR

[2689] Janne Lahtiranta and Sami Hyrynsalmi. Viewpoint: Crude and rude? *Communications of the ACM*, 61(11): 34–35, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232199/fulltext.

Chien:2018:CRI

[2690] Andrew A. Chien. China region: Introducing *Communications*' regional special sections. *Communications of the ACM*, 61(11):36–37, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232201/fulltext.

Chen:2018:CRS

[2691] Wenguang Chen and Xiang-Yang Li. China region special section: Hot topics: Welcome to the China region special section. *Communications of the ACM*, 61(11):38, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232205/fulltext.

Zaagman:2018:CRS

[2692] Elliott Zaagman. China region special section: Hot topics: China's computing ambitions. *Communications of the ACM*, 61(11):40–41, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232206/fulltext.

Lu:2018:CRSa

[2693] Chao-Yang Lu, Cheng-Zhi Peng, and Jian-Wei Pan. China region special section: Hot topics: Quantum communication at 7,600km and beyond. *Communications of the ACM*, 61

(11):42–43, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232207/fulltext.

Zhu:2018:CRS

[2694] Jun Zhu, Tiejun Huang, Wenguang Chen, and Wen Gao. China region special section: Hot topics: The future of artificial intelligence in China. *Communications of the ACM*, 61(11): 44–45, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232209/fulltext.

Guy:2018:CRS

[2695] Peter Guy. China region special section: Hot topics: Consumers, corporations, and government: computing in China. *Communications of the ACM*, 61(11):46–47, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232208/fulltext.

Zhang:2018:CRS

[2696] San Zhang. China region special section: Hot topics: Regional computing culture and personalities. *Communications of the ACM*, 61(11): 48–49, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232202/fulltext.

Li:2018:CRS

[2697] Xiang-Yang Li, Jianwei Qian, and Xiaoyang Wang. China region special section: Hot topics: Can China lead the development of data trading and sharing markets? *Communications of the ACM*, 61(11):50–51, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232203/fulltext.

Xu:2018:CRS

[2698] Luyi Xu. China region special section: Hot topics: Exploiting psychology and social behavior for game stickiness. *Communications of the ACM*, 61(11):52–53, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232204/fulltext.

Min:2018:CRS

[2699] Wanli Min, Liang Yu, Lei Yu, and Shubo He. China region special section: Big trends: People logistics in smart cities. *Communications of the ACM*, 61(11):54–59, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232218/fulltext.

Jin:2018:CRS

[2700] Hai Jin, Haibo Chen, Hong Gao, Xiang-Yang Li, and Song Wu. China region special section: Big trends: Cloud bursting for the world's largest consumer market. *Communications of the ACM*, 61(11): 60–64, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232210/fulltext.

Qi:2018:CRS

[2701] Yuan Qi and Jing Xiao. China region special section: Big trends: Fintech: AI powers financial services to improve people's lives. *Communications of the ACM*, 61(11):65–69, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232212/fulltext.

Xia:2018:CRS

[2702] Huaxia Xia and Haiming Yang. China region special section: Big trends: Is last-mile delivery a 'killer app' for self-driving vehicles? *Communications of the ACM*, 61(11):70–75, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232211/fulltext.

Zhuge:2018:CRS

[2703] Yue Zhuge. China region special section: Big trends: Video consumption, social networking, and influence. *Communications of the ACM*, 61(11):76–81, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232213/fulltext.

Lu:2018:CRSb

[2704] Yutong Lu, Depei Qian, Haohuan Fu, and Wenguang Chen. China region special section: Big trends: Will supercomputers be super-data and super-AI machines? *Communications of the ACM*, 61(11):82–87, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232217/fulltext.

Fata:2018:CCG

[2705] Matt Fata, Philippe-Joseph Arida, Patrick Hahn, and Betsy Beyer. Corp to cloud: Google's virtual desktops. *Communications of the ACM*, 61(11):88–94, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232220/fulltext.

Ratner:2018:RPK

[2706] Alex Ratner, Chris Ré, and Peter Bailis. Research for practice: knowledge base construction in the machine-learning era. *Communications of the ACM*, 61(11):95–97, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232219/fulltext.

Ghirotti:2018:TCM

[2707] Silvia Esparrachiari Ghirotti, Tanya Reilly, and Ashleigh Rentz. Tracking and controlling microservice dependencies. *Communications of the ACM*, 61(11):98–104, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232221/fulltext.

White:2018:SDV

[2708] Ryen W. White. Skill discovery in virtual assistants. *Communications of the ACM*, 61(11):106–113, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232216/fulltext.

Ierusalimschy:2018:LDL

[2709] Roberto Ierusalimschy, Luiz Henrique De Figueiredo, and Waldemar Celes. A look at the design of Lua. *Communications of the ACM*, 61(11): 114–123, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232214/fulltext.

Spinellis:2018:MDA

[2710] Diomidis Spinellis. Modern debugging: the art of finding a needle in a haystack. *Communications of the ACM*, 61(11): 124–134, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232215/fulltext.

Waddington:2018:SCC

[2711] Daniel Waddington and Jim Harris. Software challenges for the changing storage landscape. *Communications of the ACM*, 61(11): 136–145, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232222/fulltext.

Kuhn:2018:BET

[2712] Markus G. Kuhn. Backdoor engineering: technical perspective. *Communications of the ACM*, 61(11): 147, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232225/fulltext.

Checkoway:2018:WDL

[2713] Stephen Checkoway, Jacob Maskiewicz, Christina Garman, Joshua Fried, Shaanan Cohney, Matthew Green, Nadia Heninger, Ralf-Philipp Weinmann, Eric Rescorla, and Hovav Shacham. Where did I leave my keys?: lessons from the Juniper Dual EC incident. *Communications of the ACM*, 61(11): 148–155, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232227/fulltext.

Choudhury:2018:MST

[2714] Tanzeem Choudhury. Making sleep tracking more user friendly: technical perspective. *Communications of the ACM*, 61(11):156, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232223/fulltext.

Nguyen:2018:LBS

[2715] Anh Nguyen, Raghda Alqurashi, Zohreh Raghebi, Farnoush Banaei-Kashani, Ann C. Halbower, and Tam Vu. LIBS: a bioelectrical sensing system from human ears for staging whole-night sleep study. *Communications of the ACM*, 61(11): 157–165, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232224/fulltext.

Clegg:2018:LBB

[2716] Brian Clegg. Last byte: Between the abbey and the edge of time. *Communications of the ACM*, 61(11):

176–ff, November 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/11/232226/fulltext.

Cerf:2018:CSA

[2717] Vinton G. Cerf. Cerf's up: Self-authenticating identifiers. *Communications of the ACM*, 61(12):5, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/12/232883/fulltext.

Staff:2018:LER

[2718] CACM Staff. Letters to the editor: Reclaim Internet greatness. *Communications of the ACM*, 61(12):7–8, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/12/232884/fulltext.

Arquilla:2018:BSA

[2719] John Arquilla and Yegor Bugayenko. BLOG@CACM: Securing agent 111, and the job of software architect. *Communications of the ACM*, 61(12):10–11, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/12/232887/fulltext.

Edwards:2018:NLS

[2720] Chris Edwards. News: Learning to see. *Communications of the ACM*, 61(12):13–15, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/12/232888/fulltext.

Kirkpatrick:2018:NTD

[2721] Keith Kirkpatrick. News: Technology for the deaf. *Communications of the ACM*, 61(12):16–18, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/12/232889/fulltext.

Kugler:2018:NAJ

[2722] Logan Kugler. News: AI judges and juries. *Communications of the ACM*, 61(12):19–21, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/12/232890/fulltext.

Lewis:2018:PIL

[2723] Ted G. Lewis and Peter J. Denning. The profession of IT: Learning machine learning. *Communications of the ACM*, 61(12):24–27, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/12/232891/fulltext.

Neville-Neil:2018:KVC

[2724] George V. Neville-Neil. Kode vicious: A chance gardener. *Communications of the ACM*, 61(12):28–29, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2018/12/232892/fulltext.

Etzioni:2018:PCP

[2725] Oren Etzioni. Point/counterpoint: Point: Should AI technology be regulated?: yes, and here's how. *Communications of the ACM*, 61(12):

30–32, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232893/fulltext`.

OSullivan:2018:PCC

[2726] Andrea O'Sullivan and Adam Thierer. Point/counterpoint: Counterpoint: Regulators should allow the greatest space for AI innovation. *Communications of the ACM*, 61(12): 33–35, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232894/fulltext`.

White:2018:VOC

[2727] Ryen W. White. Viewpoint: Opportunities and challenges in search interaction. *Communications of the ACM*, 61 (12):36–38, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232895/fulltext`.

Bennett:2018:HLP

[2728] Rich Bennett, Craig Callahan, Stacy Jones, Matt Levine, Merrill Miller, and Andy Ozment. How to live in a post-Meltdown and -Spectre world. *Communications of the ACM*, 61(12): 40–44, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232898/fulltext`.

Nukala:2018:WSD

[2729] Shylaja Nukala and Vivek Rau. Why SRE documents matter. *Communications of the ACM*, 61(12): 45–51, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232897/fulltext`.

Matsudaira:2018:HGT

[2730] Kate Matsudaira. How to get things done when you don't feel like it. *Communications of the ACM*, 61(12): 52–54, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232896/fulltext`.

Lee:2018:WMC

[2731] Junyeong Lee and Jaylyn Jeonghyun Oh. What motivates a citizen to take the initiative in e-participation?: the case of a South Korean parliamentary hearing. *Communications of the ACM*, 61(12):56–61, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232900/fulltext`.

Knowles:2018:UCF

[2732] Bran Knowles, Alison Smith-Renner, Forough Poursabzi-Sangdeh, Di Lu, and Halimat Alabi. Uncertainty in current and future health wearables. *Communications of the ACM*, 61(12): 62–67, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232877/fulltext`.

Grosz:2018:CLC

[2733] Barbara J. Grosz and Peter Stone. A century-long commitment to assessing artificial intelligence and its impact on society. *Communications of the ACM*, 61(12):68–73, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232899/fulltext`.

McDuff:2018:DES

[2734] Daniel McDuff and Mary Czerwinski. Designing emotionally sentient agents. *Communications of the ACM*, 61(12):74–83, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232878/fulltext`.

Alur:2018:SBP

[2735] Rajeev Alur, Rishabh Singh, Dana Fisman, and Armando Solar-Lezama. Search-based program synthesis. *Communications of the ACM*, 61(12): 84–93, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232879/fulltext`.

Harris:2018:TPN

[2736] Tim Harris. Technical perspective: Node replication divides to conquer. *Communications of the ACM*, 61 (12):96, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232886/fulltext`.

Calciu:2018:HIC

[2737] Irina Calciu, Siddhartha Sen, Mahesh Balakrishnan, and Marcos K. Aguilera. How to implement any concurrent data structure. *Communications of the ACM*, 61(12):97–105, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232880/fulltext`.

Moller:2018:TPW

[2738] Anders Møller. Technical perspective: WebAssembly: a quiet revolution of the web. *Communications of the ACM*, 61(12):106, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232885/fulltext`.

Rossberg:2018:BWS

[2739] Andreas Rossberg, Ben L. Titzer, Andreas Haas, Derek L. Schuff, Dan Gohman, Luke Wagner, Alon Zakai, J. F. Bastien, and Michael Holman. Bringing the web up to speed with WebAssembly. *Communications of the ACM*, 61(12):107–115, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232881/fulltext`.

Hoffmann:2018:LBP

[2740] Leah Hoffmann. Last byte: Promoting common sense, reality, dependable engineering. *Communications of the ACM*, 61(12):128–ff, December 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2018/12/232882/fulltext`.

Chien:2019:ELOa

[2741] Andrew A. Chien. Editor's letter: Open collaboration in an age of distrust. *Communications of the ACM*, 62(1):5, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233509/fulltext.

Cerf:2019:CPC

[2742] Vinton G. Cerf. Cerf's up: A people-centered economy. *Communications of the ACM*, 62(1):6, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233510/fulltext.

Vardi:2019:DWH

[2743] Moshe Y. Vardi. Departments: Are we having an ethical crisis in computing? *Communications of the ACM*, 62(1):7, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233511/fulltext.

Robertson:2019:BAC

[2744] Judy Robertson. BLOG@CACM: Answering children's questions about computers. *Communications of the ACM*, 62(1):8–9, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233512/fulltext.

Monroe:2019:NQL

[2745] Don Monroe. News: Quantum leap. *Communications of the ACM*, 62(1):10–12, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233514/fulltext.

Edwards:2019:NHM

[2746] Chris Edwards. News: Hidden messages fool AI. *Communications of the ACM*, 62(1):13–14, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233515/fulltext.

Shein:2019:NWO

[2747] Esther Shein. News: Who owns 3D scans of historic sites? *Communications of the ACM*, 62(1):15–17, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233513/fulltext.

Gal:2019:LTI

[2748] Michal S. Gal. Law and technology: Illegal pricing algorithms. *Communications of the ACM*, 62(1):18–20, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233516/fulltext.

Cusumano:2019:TSMa

[2749] Michael A. Cusumano. Technology strategy and management: CRISPR: an emerging platform for gene editing. *Communications of the ACM*, 62(1):21–23, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233517/fulltext.

Haigh:2019:HRH

[2750] Thomas Haigh. Historical reflections: Hey Google, what's a moonshot?: how

Silicon Valley mocks Apollo. *Communications of the ACM*, 62(1):24–30, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233518/fulltext.

DaVitoriaLobo:2019:VUY

[2751] Niels Da Vitoria Lobo and Mubarak A. Shah. Viewpoint: UCF's 30-year REU site in computer vision. *Communications of the ACM*, 62(1):31–34, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233520/fulltext.

Lee:2019:VME

[2752] Edward A. Lee. Viewpoint: Modeling in engineering and science. *Communications of the ACM*, 62(1):35–36, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233519/fulltext.

Lam:2019:URC

[2753] Alpha Lam. Using remote cache service for Bazel. *Communications of the ACM*, 62(1):38–42, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233524/fulltext.

Frazelle:2019:RPS

[2754] Jessie Frazelle. Research for practice: security for the modern age. *Communications of the ACM*, 62(1):43–45, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233525/fulltext.

Limoncelli:2019:SNE

[2755] Thomas A. Limoncelli. SQL is no excuse to avoid DevOps. *Communications of the ACM*, 62(1):46–49, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233521/fulltext.

Seidel:2019:ATD

[2756] Stefan Seidel, Nicholas Berente, Aron Lindberg, Kalle Lyytinen, and Jeffrey V. Nickerson. Autonomous tools and design: a triple-loop approach to human-machine learning. *Communications of the ACM*, 62(1):50–57, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233528/fulltext.

Orenga-Rogla:2019:FIB

[2757] Sergio Orenga-Roglá and Ricardo Chalmeta. Framework for implementing a big data ecosystem in organizations. *Communications of the ACM*, 62(1):58–65, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233527/fulltext.

Copeland:2019:CTT

[2758] B. Jack Copeland and Oron Shagrir. The Church–Turing thesis: logical limit or breachable barrier? *Communications of the ACM*, 62(1):66–74, January 2019. CODEN CACMA2.

ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233526/fulltext.

Gil:2019:ISG

[2759] Yolanda Gil, Suzanne A. Pierce, Hassan Babaie, Arindam Banerjee, Kirk Borne, Gary Bust, Michelle Cheatham, Imme Ebert-Uphoff, Carla Gomes, Mary Hill, John Horel, Leslie Hsu, Jim Kinter, Craig Knoblock, David Krum, Vipin Kumar, Pierre Lermusiaux, Yan Liu, Chris North, Victor Pankratius, Shanan Peters, Beth Plale, Allen Pope, Sai Ravela, Juan Restrepo, Aaron Ridley, Hanan Samet, and Shashi Shekhar. Intelligent systems for geosciences: an essential research agenda. *Communications of the ACM*, 62(1):76–84, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233529/fulltext.

Casey:2019:DIS

[2760] William Casey, Ansgar Kellner, Parisa Memarmoshrefi, Jose Andre Morales, and Bud Mishra. Deception, identity, and security: the game theory of sybil attacks. *Communications of the ACM*, 62(1):85–93, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233530/fulltext.

Li:2019:PFD

[2761] Hao Li. Photorealistic facial digitization and manipulation: technical perspective. *Communications of the ACM*, 62(1):95, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233532/fulltext.

Thies:2019:FRT

[2762] Justus Thies, Michael Zollhöfer, Marc Stamminger, Christian Theobalt, and Matthias Nießner. Face2Face: real-time face capture and reenactment of RGB videos. *Communications of the ACM*, 62(1):96–104, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233531/fulltext.

Boneh:2019:ACK

[2763] Dan Boneh. Attacking cryptographic key exchange with precomputation: technical perspective. *Communications of the ACM*, 62(1):105, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233522/fulltext.

Adrian:2019:IFS

[2764] David Adrian, Karthikeyan Bhargavan, Zakir Durumeric, Pierrick Gaudry, Matthew Green, J. Alex Halderman, Nadia Heninger, Drew Springall, Emmanuel Thomé, Luke Valenta, Benjamin VanderSloot, Eric Wustrow, Santiago Zanella-Béguelin, and Paul Zimmermann. Imperfect forward secrecy: how Diffie–Hellman fails in practice. *Communications of the ACM*, 62(1):106–114, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233523/fulltext.

Shasha:2019:LBR

[2765] Dennis Shasha. Last byte: Randomized anti-counterfeiting. *Communications of the ACM*, 62(1):120–ff, January 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/1/233533/fulltext.

Cerf:2019:CLC

[2766] Vinton G. Cerf. Cerf's up: Libraries considered hazardous. *Communications of the ACM*, 62(2):5, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234340/fulltext.

Staff:2019:LEBa

[2767] CACM Staff. Letters to the editor: Between the lines in the China region special section. *Communications of the ACM*, 62(2):6–7, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234341/fulltext.

Bruderer:2019:BSD

[2768] Herbert Bruderer and Robin K. Hill. BLOG@CACM: Seeking digital humanities, IT tech support. *Communications of the ACM*, 62(2):8–9, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234338/fulltext.

Greengard:2019:NBN

[2769] Samuel Greengard. News: A brave new world of genetic engineering. *Communications of the ACM*, 62(2):11–13, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234342/fulltext.

Kirkpatrick:2019:NTA

[2770] Keith Kirkpatrick. News: Technologizing agriculture. *Communications of the ACM*, 62(2):14–16, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234343/fulltext.

Kugler:2019:NBR

[2771] Logan Kugler. News: Being recognized everywhere. *Communications of the ACM*, 62(2):17–19, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234339/fulltext.

Landwher:2019:PSB

[2772] Carl Landwher. Privacy and security: 2018: a big year for privacy. *Communications of the ACM*, 62(2):20–22, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234344/fulltext.

Frieze:2019:BPH

[2773] Carol Frieze and Jeria L. Quesenberry. Broadening participation: How computer science at CMU is attracting and retaining women. *Communications of the ACM*, 62(2):23–26, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL

https://cacm.acm.org/magazines/2019/2/234346/fulltext.

Neville-Neil:2019:KVWa

[2774] George V. Neville-Neil. Kode vicious: Writing a test plan. *Communications of the ACM*, 62(2):27, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234347/fulltext.

Feitelson:2019:VTL

[2775] Dror G. Feitelson. Viewpoint: Tony's law. *Communications of the ACM*, 62(2):28–31, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234349/fulltext.

Nardelli:2019:VDW

[2776] Enrico Nardelli. Viewpoint: Do we really need computational thinking? *Communications of the ACM*, 62(2):32–35, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234348/fulltext.

Staff:2019:CIC

[2777] CACM Staff. CodeFlow: improving the code review process at Microsoft. *Communications of the ACM*, 62(2):36–44, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234350/fulltext.

Matsudaira:2019:IGF

[2778] Kate Matsudaira. The importance of a great finish. *Communications of the ACM*, 62(2):45–47, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234351/fulltext.

Hennessy:2019:NGA

[2779] John L. Hennessy and David A. Patterson. A new golden age for computer architecture. *Communications of the ACM*, 62(2):48–60, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234352/fulltext.

Gao:2019:ECU

[2780] Chao Gao, Zhen Su, Jiming Liu, and Jürgen Kurths. Even central users do not always drive information diffusion. *Communications of the ACM*, 62(2):61–67, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234353/fulltext.

Bello:2019:SSM

[2781] Juan P. Bello, Claudio Silva, Oded Nov, R. Luke Dubois, Anish Arora, Justin Salamon, Charles Mydlarz, and Harish Doraiswamy. SONYC: a system for monitoring, analyzing, and mitigating urban noise pollution. *Communications of the ACM*, 62(2):68–77, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234354/fulltext.

Herlihy:2019:BDC

[2782] Maurice Herlihy. Blockchains from a distributed computing perspective.

Communications of the ACM, 62(2): 78–85, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234355/fulltext.

OHearn:2019:SL

[2783] Peter O'Hearn. Separation logic. *Communications of the ACM*, 62(2):86–95, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234356/fulltext.

Wenisch:2019:HET

[2784] Thomas F. Wenisch. How economic theories can help computers beat the heat: technical perspective. *Communications of the ACM*, 62(2):97, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234357/fulltext.

Fan:2019:DSC

[2785] Songchun Fan, Seyed Majid Zahedi, and Benjamin C. Lee. Distributed strategies for computational sprints. *Communications of the ACM*, 62(2): 98–106, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234359/fulltext.

Chaudhuri:2019:DDE

[2786] Surajit Chaudhuri. To do or not to do: extending SQL with integer linear programming?: technical perspective. *Communications of the ACM*, 62(2):107, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234345/fulltext.

Brucato:2019:SCH

[2787] Matteo Brucato, Azza Abouzied, and Alexandra Meliou. Scalable computation of high-order optimization queries. *Communications of the ACM*, 62(2): 108–116, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234358/fulltext.

Batchelor:2019:LBH

[2788] David Allen Batchelor. Last byte: Hawking's nightmare. *Communications of the ACM*, 62(2):120–ff, February 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/2/234360/fulltext.

Chien:2019:ELOb

[2789] Andrew A. Chien. Editor's letter: Owning computing's environmental impact. *Communications of the ACM*, 62(3):5, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234911/fulltext.

Cerf:2019:COV

[2790] Vinton G. Cerf. Cerf's up: Ownership vs. stewardship. *Communications of the ACM*, 62(3):6, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234912/fulltext.

Vardi:2019:DLM

[2791] Moshe Y. Vardi. Departments: Lost in math? *Communications of the ACM*, 62(3):7, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234913/fulltext.

Hall:2019:BSP

[2792] Mary Hall, Richard Ladner, Diane Levitt, Manuel A. Pérez Quiñones, and Saurabh Bagchi. BLOG@CACM: Smoothing the path to computing: pondering uses for big data. *Communications of the ACM*, 62(3):8–9, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234914/fulltext.

Kugler:2019:NBB

[2793] Logan Kugler. News: Building a better battery. *Communications of the ACM*, 62(3):11–13, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234916/fulltext.

Shein:2019:NET

[2794] Esther Shein. News: Exoskeletons today. *Communications of the ACM*, 62(3):14–16, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234915/fulltext.

Kirkpatrick:2019:NEN

[2795] Keith Kirkpatrick. News: Electronics need rare earths. *Communications of the ACM*, 62(3):17–18, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234917/fulltext.

Samuelson:2019:LSQ

[2796] Pamela Samuelson. Legally speaking: Questioning a new intellectual property right for press publishers. *Communications of the ACM*, 62(3):20–23, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234918/fulltext.

Turel:2019:EBD

[2797] Ofir Turel. Economic and business dimensions: Potential 'dark sides' of leisure technology use in youth. *Communications of the ACM*, 62(3):24–27, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234919/fulltext.

Denning:2019:PIIa

[2798] Peter J. Denning. The profession of IT: An interview with William Hugh Murray. *Communications of the ACM*, 62(3):28–30, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234920/fulltext.

Vakil:2019:EAP

[2799] Sepehr Vakil and Jennifer Higgs. Education: It's about power. *Communications of the ACM*, 62(3):31–33, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317

(electronic). URL https://cacm.acm.org/magazines/2019/3/234921/fulltext.

Tissenbaum:2019:VCT

[2800] Mike Tissenbaum, Josh Sheldon, and Hal Abelson. Viewpoint: From computational thinking to computational action. *Communications of the ACM*, 62(3):34–36, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234922/fulltext.

Waldo:2019:HGB

[2801] Jim Waldo. A hitchhiker's guide to the blockchain universe. *Communications of the ACM*, 62(3):38–42, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234926/fulltext.

Matsudaira:2019:DPM

[2802] Kate Matsudaira. Design patterns for managing up. *Communications of the ACM*, 62(3):43–45, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234923/fulltext.

Garfinkel:2019:UDR

[2803] Simson Garfinkel, John M. Abowd, and Christian Martindale. Understanding database reconstruction attacks on public data. *Communications of the ACM*, 62(3):46–53, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234925/fulltext.

Pearl:2019:STC

[2804] Judea Pearl. The seven tools of causal inference, with reflections on machine learning. *Communications of the ACM*, 62(3):54–60, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234929/fulltext.

Zhou:2019:MTD

[2805] Zhi Quan Zhou and Liqun Sun. Metamorphic testing of driverless cars. *Communications of the ACM*, 62(3):61–67, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234930/fulltext.

Siddharthan:2019:BBT

[2806] Advaith Siddharthan, Kapila Ponnamperuma, Chris Mellish, Chen Zeng, Daniel Heptinstall, Annie Robinson, Stuart Benn, and René Van Der Wal. Blogging birds: telling informative stories about the lives of birds from telemetric data. *Communications of the ACM*, 62(3):68–77, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234928/fulltext.

Zave:2019:CAI

[2807] Pamela Zave and Jennifer Rexford. The compositional architecture of the Internet. *Communications of the ACM*, 62(3):78–87, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234927/fulltext.

Roughgarden:2019:BWC

[2808] Tim Roughgarden. Beyond worst-case analysis. *Communications of the ACM*, 62(3):88–96, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234931/fulltext.

Rinard:2019:TPB

[2809] Martin C. Rinard. Technical perspective: Borrowing big code to automate programming activities. *Communications of the ACM*, 62(3):98, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234924/fulltext.

Raychev:2019:PPP

[2810] Veselin Raychev, Martin Vechev, and Andreas Krause. Predicting program properties from 'big code'. *Communications of the ACM*, 62(3):99–107, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234932/fulltext.

Vishnoi:2019:TPI

[2811] Nisheeth K. Vishnoi. Technical perspective: Isolating a matching when your coins go missing. *Communications of the ACM*, 62(3):108, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234935/fulltext.

Fenner:2019:DPA

[2812] Stephen Fenner, Rohit Gurjar, and Thomas Thierauf. A deterministic parallel algorithm for bipartite perfect matching. *Communications of the ACM*, 62(3):109–115, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234934/fulltext.

Hoffmann:2019:LBG

[2813] Leah Hoffmann. Last byte: Guiding computers, robots to see and think. *Communications of the ACM*, 62(3):120–ff, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/3/234933/fulltext.

Cerf:2019:CDN

[2814] Vinton G. Cerf. Cerf's up: In debt to the NSF. *Communications of the ACM*, 62(4):5, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235588/fulltext.

Hill:2019:BPVa

[2815] Robin K. Hill and Mark Guzdial. BLOG@CACM: Pondering variables and direct instruction. *Communications of the ACM*, 62(4):6, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235572/fulltext.

Edwards:2019:NSR

[2816] Chris Edwards. News: Soft robots look to new environments. *Communica-*

tions of the ACM, 62(4):9, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235575/fulltext.

Greengard:2019:NFD

[2817] Samuel Greengard. News: The future of data storage. *Communications of the ACM*, 62(4):12, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235573/fulltext.

Underwood:2019:NFL

[2818] Sarah Underwood. News: The fine line between coercion and care. *Communications of the ACM*, 62(4):15, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235574/fulltext.

Sako:2019:TSM

[2819] Mari Sako. Technology strategy and management: Free trade in a digital world. *Communications of the ACM*, 62(4):18, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235617/fulltext.

Neville-Neil:2019:KVKa

[2820] George V. Neville-Neil. Kode Vicious: Know your algorithms. *Communications of the ACM*, 62(4):22, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235618/fulltext.

Lewandowski:2019:VWM

[2821] Dirk Lewandowski. Viewpoint: The web is missing an essential part of infrastructure: an open web index. *Communications of the ACM*, 62(4):24, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235619/fulltext.

Fatourou:2019:ERW

[2822] Panagiota Fatourou and Chris Hankin. Europe region: Welcome to the Europe region special section. *Communications of the ACM*, 62(4):28, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235591/fulltext.

Korrigane:2019:ERS

[2823] Lisa Korrigane. Europe region special section: Hot topics: A demographic snapshot of the IT workforce in Europe. *Communications of the ACM*, 62(4):32, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235593/fulltext.

Pringle:2019:ERSa

[2824] David Pringle. Europe region special section: Hot topics: Enterprises lead ICT innovation in Europe. *Communications of the ACM*, 62(4):34, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235590/fulltext.

Pringle:2019:ERSb

[2825] David Pringle. Europe region special section: Hot topics: Europe's ambitious ICT agenda. *Communications of the ACM*, 62(4):35, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235592/fulltext.

Pringle:2019:ERSc

[2826] David Pringle. Europe region special section: Hot topics: Europe's well-connected consumers. *Communications of the ACM*, 62(4):36, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235595/fulltext.

Kalman:2019:ERS

[2827] Laurence Kalman. Europe region special section: Hot topics: New European data privacy and cyber security laws: one year later. *Communications of the ACM*, 62(4):38, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235589/fulltext.

Gulliksen:2019:ERS

[2828] Jan Gulliksen. Europe region special section: Hot topics: Incorporating Europe's values in future research. *Communications of the ACM*, 62(4):40, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235594/fulltext.

Bosschere:2019:ERS

[2829] Koen De Bosschere, Marc Duranton, and Madeleine Gray. Europe region special section: Hot topics: HiPEAC: a European network built to last. *Communications of the ACM*, 62(4):42, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235576/fulltext.

Jorge:2019:ERS

[2830] Joaquim Jorge, Mashhuda Glencross, and Aaron Quigley. Europe region special section: Hot topics: ACM Europe Council's best paper awards. *Communications of the ACM*, 62(4):44, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235596/fulltext.

McCann:2019:ERS

[2831] Julie A. McCann, Gian Pietro Picco, Alex Gluhak, Karl Henrik Johansson, Martin Törngren, and Laila Gide. Europe region special section: Big trends: Connected things connecting Europe. *Communications of the ACM*, 62(4):46, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235602/fulltext.

Fatourou:2019:ERS

[2832] Panagiota Fatourou, Yota Papageorgiou, and Vasiliki Petousi. Europe region special section: Big trends: Women are needed in STEM: European policies and incentives. *Communica-*

tions of the ACM, 62(4):52, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235600/fulltext.

Caspersen:2019:ERS

[2833] Michael E. Caspersen, Judith Gal-Ezer, Andrew McGettrick, and Enrico Nardelli. Europe region special section: Big trends: Informatics as a fundamental discipline for the 21st century. *Communications of the ACM*, 62(4):58, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235598/fulltext.

Inverardi:2019:ERS

[2834] Paola Inverardi. Europe region special section: Big trends: The European perspective on responsible computing. *Communications of the ACM*, 62(4):64, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235599/fulltext.

Skordas:2019:ERS

[2835] Thomas Skordas. Europe region special section: Big trends: Toward a European exascale ecosystem: the EuroHPC joint undertaking. *Communications of the ACM*, 62(4):70, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235601/fulltext.

Staab:2019:ERS

[2836] Steffen Staab, Susan Halford, and Wendy Hall. Europe region special section: Big trends: Web science in Europe: beyond boundaries. *Communications of the ACM*, 62(4):74, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235597/fulltext.

Helland:2019:ION

[2837] Pat Helland. Identity by any other name. *Communications of the ACM*, 62(4):80, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235620/fulltext.

Sloss:2019:MM

[2838] Benjamin Treynor Sloss, Shylaja Nukala, and Vivek Rau. Metrics that matter. *Communications of the ACM*, 62(4):88, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235621/fulltext.

Mor:2019:RPE

[2839] Nitesh Mor. Research for practice: edge computing. *Communications of the ACM*, 62(4):95, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235622/fulltext.

Khatri:2019:AMW

[2840] Vijay Khatri and Binny M. Samuel. Analytics for managerial work. *Communications of the ACM*, 62(4):100, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.

acm.org/magazines/2019/4/235623/fulltext.

Aimone:2019:NAC

[2841] James B. Aimone. Neural algorithms and computing beyond Moore's law. *Communications of the ACM*, 62(4): 110, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235577/fulltext.

Wallden:2019:CSQ

[2842] Petros Wallden and Elham Kashefi. Cyber security in the quantum era. *Communications of the ACM*, 62(4): 120, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235578/fulltext.

Brassard:2019:TPW

[2843] Gilles Brassard. Technical perspective: Was Edgar Allan Poe wrong after all? *Communications of the ACM*, 62(4):132, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235625/fulltext.

Vazirani:2019:FDI

[2844] Umesh Vazirani and Thomas Vidick. Fully device independent quantum key distribution. *Communications of the ACM*, 62(4):133, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235624/fulltext.

Shasha:2019:LBF

[2845] Dennis Shasha. Last byte: Fighting for lava. *Communications of the ACM*, 62(4):144, April 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/4/235626/fulltext.

Cerf:2019:CAS

[2846] Vinton G. Cerf. Cerf's up: APIs, standards, and enabling infrastructure. *Communications of the ACM*, 62(5): 5, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236425/fulltext.

Vardi:2019:DQH

[2847] Moshe Y. Vardi. Departments: Quantum hype and quantum skepticism. *Communications of the ACM*, 62(5): 7, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236426/fulltext.

Staff:2019:LED

[2848] CACM Staff. Letters to the editor: Don't ignore the cost of 'embedded energy'. *Communications of the ACM*, 62(5):10–11, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236427/fulltext.

Carrier:2019:BIG

[2849] Ryan Carrier. BLOG@CACM: Implementing guidelines for governance, oversight of AI, and automation. *Communications of the ACM*, 62(5):12–13, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236428/fulltext.

Edwards:2019:NQQ

[2850] Chris Edwards. News: Questioning quantum. *Communications of the ACM*, 62(5):15–17, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236415/fulltext.

Savage:2019:NCT

[2851] Neil Savage. News: Code talkers. *Communications of the ACM*, 62(5):18–19, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236416/fulltext.

Greengard:2019:NDI

[2852] Samuel Greengard. News: Deep insecurities: the Internet of Things shifts technology risk. *Communications of the ACM*, 62(5):20–22, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236417/fulltext.

Grimmelmann:2019:LTC

[2853] James Grimmelmann. Law and technology: Continuity and change in Internet law. *Communications of the ACM*, 62(5):24–26, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236418/fulltext.

Feigenbaum:2019:PSE

[2854] Joan Feigenbaum. Privacy and security: Encryption and surveillance. *Communications of the ACM*, 62(5):27–29, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236419/fulltext.

Schanzer:2019:EWD

[2855] Emmanuel Schanzer, Shriram Krishnamurthi, and Kathi Fisler. Education: What does it mean for a computing curriculum to succeed? *Communications of the ACM*, 62(5):30–32, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236420/fulltext.

Bartoli:2019:VEW

[2856] Alberto Bartoli, Eric Medvet, Andrea De Lorenzo, and Fabiano Tarlao. Viewpoint: Enterprise wi-fi: we need devices that are secure by default. *Communications of the ACM*, 62(5):33–35, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236421/fulltext.

Blum:2019:ADP

[2857] Raymond Blum and Betsy Beyer. Achieving digital permanence. *Communications of the ACM*, 62(5):36–42, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317

(electronic). URL https://cacm.acm.org/magazines/2019/5/236424/fulltext.

Kleppmann:2019:OEP

[2858] Martin Kleppmann, Alastair R. Beresford, and Boerge Svingen. Online event processing. *Communications of the ACM*, 62(5):43–49, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236423/fulltext.

Kuzmanovic:2019:NNU

[2859] Aleksandar Kuzmanovic. Net neutrality: unexpected solution to blockchain scaling. *Communications of the ACM*, 62(5):50–55, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236422/fulltext.

Payton:2019:CNI

[2860] Fay Cobb Payton and Eleni Berki. Countering the negative image of women in computing. *Communications of the ACM*, 62(5):56–63, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236409/fulltext.

Wang:2019:LBI

[2861] Yongge Wang and Qutaibah M. Malluhi. The limit of blockchains: infeasibility of a smart Obama–Trump contract. *Communications of the ACM*, 62(5):64–69, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236410/fulltext.

Downey:2019:AR

[2862] Rod Downey and Denis R. Hirschfeldt. Algorithmic randomness. *Communications of the ACM*, 62(5):70–80, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236411/fulltext.

Ives:2019:TPC

[2863] Zachary G. Ives. Technical perspective: Compressing matrices for large-scale machine learning. *Communications of the ACM*, 62(5):82, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236412/fulltext.

Elgohary:2019:CLA

[2864] Ahmed Elgohary, Matthias Boehm, Peter J. Haas, Frederick R. Reiss, and Berthold Reinwald. Compressed linear algebra for declarative large-scale machine learning. *Communications of the ACM*, 62(5):83–91, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236413/fulltext.

MacLeod:2019:LBL

[2865] Ken MacLeod. Last byte: Like old times. *Communications of the ACM*, 62(5):96–ff, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/5/236414/fulltext.

Pancake:2019:ELA

[2866] Cherri M. Pancake. Editor's letter: ACM awards honor CS contributions. *Communications of the ACM*, 62(6):5, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/6/236999/fulltext`.

Cerf:2019:CBFa

[2867] Vinton G. Cerf. Cerf's up: Back to the future. *Communications of the ACM*, 62(6):7, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/6/236988/fulltext`.

Guzdial:2019:BCR

[2868] Mark Guzdial and John Arquilla. BLOG@CACM: Is CS really for all, and defending democracy in cyberspace. *Communications of the ACM*, 62(6):8–9, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/6/236989/fulltext`.

Savage:2019:NNN

[2869] Neil Savage. News: Neural net worth. *Communications of the ACM*, 62(6): 10–12, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/6/236990/fulltext`.

Anthes:2019:NLL

[2870] Gary Anthes. News: Lifelong learning in artificial neural networks. *Communications of the ACM*, 62(6):13–15, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/6/236992/fulltext`.

Kugler:2019:TST

[2871] Logan Kugler. The trouble with SMS two-factor authentication. *Communications of the ACM*, 62(6):14, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/6/236992/fulltext`.

Monroe:2019:NTT

[2872] Don Monroe. News: And then, there were three. *Communications of the ACM*, 62(6):16–18, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/6/236991/fulltext`.

Kirkpatrick:2019:NET

[2873] Keith Kirkpatrick. News: Ethics in technology jobs. *Communications of the ACM*, 62(6):19–20, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/6/236993/fulltext`.

Taylor:2019:GCG

[2874] Linnet Taylor. Global computing: Global data justice. *Communications of the ACM*, 62(6):22–24, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/6/236994/fulltext`.

Markettos:2019:IRT

[2875] A. T. Markettos, R. N. M. Watson, S. W. Moore, P. Sewell, and P. G. Neumann. Inside risks: Through computer architecture, darkly. *Communications of the ACM*, 62(6):25–27, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/236995/fulltext.

Denning:2019:PIIb

[2876] Peter J. Denning. The profession of IT: An interview with David Brin on resiliency. *Communications of the ACM*, 62(6):28–31, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/236996/fulltext.

Pasquier:2019:VPD

[2877] Thomas Pasquier, David Eyers, and Jean Bacon. Viewpoint: Personal data and the Internet of Things. *Communications of the ACM*, 62(6):32–34, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/236997/fulltext.

Degenbaev:2019:GCJ

[2878] Ulan Degenbaev, Michael Lippautz, and Hannes Payer. Garbage collection as a joint venture. *Communications of the ACM*, 62(6):36–41, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/236998/fulltext.

Matsudaira:2019:HCG

[2879] Kate Matsudaira. How to create a great team culture (and why it matters). *Communications of the ACM*, 62(6):42–44, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/237001/fulltext.

Lipton:2019:RPT

[2880] Zachary C. Lipton and Jacob Steinhardt. Research for practice: troubling trends in machine-learning scholarship. *Communications of the ACM*, 62(6):45–53, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/237000/fulltext.

Do:2019:PSS

[2881] Jaeyoung Do, Sudipta Sengupta, and Steven Swanson. Programmable solid-state storage in future cloud datacenters. *Communications of the ACM*, 62(6):54–62, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/237002/fulltext.

Saydjari:2019:ETS

[2882] O. Sami Saydjari. Engineering trustworthy systems: a principled approach to cybersecurity. *Communications of the ACM*, 62(6):63–69, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/237003/fulltext.

Weld:2019:CCI

[2883] Daniel S. Weld and Gagan Bansal. The challenge of crafting intelligible intelligence. *Communications of the ACM*, 62(6):70–79, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/237004/fulltext.

Nikhil:2019:TPB

[2884] Rishiyur S. Nikhil. Technical perspective: back to the edge. *Communications of the ACM*, 62(6):82, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/236986/fulltext.

Nowatzki:2019:HND

[2885] Tony Nowatzki, Vinay Gangadhar, and Karthikeyan Sankaralingam. Heterogeneous Von Neumann/dataflow microprocessors. *Communications of the ACM*, 62(6):83–91, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/237005/fulltext.

Hoffmann:2019:LBRa

[2886] Leah Hoffmann. Last byte: Reaching new heights with artificial neural networks. *Communications of the ACM*, 62(6):96–ff, June 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/6/236987/fulltext.

Chien:2019:ELH

[2887] Andrew A. Chien. Editor's letter: Halfway round!: growing the regional special sections. *Communications of the ACM*, 62(7):5, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237699/fulltext.

Cerf:2019:CBFb

[2888] Vinton G. Cerf. Cerf's up: Back to the future, part II. *Communications of the ACM*, 62(7):6, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237700/fulltext.

Vardi:2019:DSH

[2889] Moshe Y. Vardi. Departments: To serve humanity. *Communications of the ACM*, 62(7):7, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237701/fulltext.

Townsend:2019:BBM

[2890] Gloria Townsend and Sheldon Waite. BLOG@CACM: Bringing more women, immigrants, to computer science. *Communications of the ACM*, 62(7):8–9, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237702/fulltext.

Klarreich:2019:NGA

[2891] Erica Klarreich. News: Good algorithms make good neighbors. *Communications of the ACM*, 62(7):11–13, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.

acm.org/magazines/2019/7/237703/fulltext.

Kirkpatrick:2019:NEC

[2892] Keith Kirkpatrick. News: The edge of computational photography. *Communications of the ACM*, 62(7):14–16, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237705/fulltext.

Kugler:2019:NPC

[2893] Logan Kugler. News: Protecting the 2020 census. *Communications of the ACM*, 62(7):17–19, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237704/fulltext.

Samuelson:2019:LSA

[2894] Pamela Samuelson. Legally speaking: API copyrights revisited. *Communications of the ACM*, 62(7):20–22, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237706/fulltext.

Winter:2019:CEW

[2895] Susan J. Winter. Computing ethics: Who benefits? *Communications of the ACM*, 62(7):23–25, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237707/fulltext.

Nordfors:2019:BPN

[2896] David Nordfors, Chally Grundwag, and V. R. Ferose. Broadening participation: A new labor market for people with 'coolabilities'. *Communications of the ACM*, 62(7):26–28, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237708/fulltext.

Berger:2019:VGR

[2897] Emery Berger, Stephen M. Blackburn, Carla Brodley, H. V. Jagadish, Kathryn S. McKinley, Mario A. Nascimento, Minjeong Shin, Kuansan Wang, and Lexing Xie. Viewpoint: GOTO rankings considered helpful. *Communications of the ACM*, 62(7):29–30, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237709/fulltext.

Helland:2019:ESL

[2898] Pat Helland. Extract, shoehorn, and load. *Communications of the ACM*, 62(7):32–33, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237710/fulltext.

Limoncelli:2019:TTE

[2899] Thomas A. Limoncelli. The top 10 things executives should know about software. *Communications of the ACM*, 62(7):34–40, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237712/fulltext.

Staff:2019:ACH

[2900] CACM Staff. Access controls and healthcare records: who owns the data?

Communications of the ACM, 62(7): 41–46, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237711/fulltext.

Beck:2019:HM

[2901] Micah Beck. On the hourglass model. *Communications of the ACM*, 62(7): 48–57, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237714/fulltext.

Frauenberger:2019:WTI

[2902] Christopher Frauenberger and Peter Purgathofer. Ways of thinking in informatics. *Communications of the ACM*, 62(7):58–64, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237713/fulltext.

Tran:2019:ITS

[2903] Nguyen Khoi Tran, Quan Z. Sheng, M. Ali Babar, Lina Yao, Wei Emma Zhang, and Schahram Dustdar. Internet of Things search engine. *Communications of the ACM*, 62(7):66–73, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237716/fulltext.

Domingos:2019:ULS

[2904] Pedro Domingos and Daniel Lowd. Unifying logical and statistical AI with Markov logic. *Communications of the ACM*, 62(7):74–83, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237715/fulltext.

Raiciu:2019:TPD

[2905] Costin Raiciu. Technical perspective: Do you know why your web pages load faster? *Communications of the ACM*, 62(7):85, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237718/fulltext.

Kakhki:2019:TLL

[2906] Arash Molavi Kakhki, Samuel Jero, David Choffnes, Cristina Nita-Rotaru, and Alan Mislove. Taking a long look at QUIC: an approach for rigorous evaluation of rapidly evolving transport protocols. *Communications of the ACM*, 62(7):86–94, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237717/fulltext.

Shasha:2019:LBO

[2907] Dennis Shasha. Last byte: Opioid games. *Communications of the ACM*, 62(7):96–ff, July 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/7/237719/fulltext.

Pancake:2019:PDC

[2908] Cherri M. Pancake. From the President: Dispelling common myths about ACM awards and honors. *Communications of the ACM*, 62(8):5, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317

(electronic). URL https://cacm.acm.org/magazines/2019/8/238333/fulltext.

Cerf:2019:CUR

[2909] Vinton G. Cerf. Cerf's up: Undo, redo, and regrets. *Communications of the ACM*, 62(8):7, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238334/fulltext.

Staff:2019:LEC

[2910] CACM Staff. Letters to the editor: A case against mission-critical applications of machine learning. *Communications of the ACM*, 62(8):9, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238335/fulltext.

Guzdial:2019:BCW

[2911] Mark Guzdial. BLOG@CACM: Cutting the wait for CS advice. *Communications of the ACM*, 62(8):12–13, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238336/fulltext.

Greengard:2019:NAC

[2912] Samuel Greengard. News: The algorithm that changed quantum machine learning. *Communications of the ACM*, 62(8):15–17, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238339/fulltext.

Monroe:2019:NDU

[2913] Don Monroe. News: I don't understand my car. *Communications of the ACM*, 62(8):18–19, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238338/fulltext.

Mone:2019:NWM

[2914] Gregory Mone. News: What makes a robot likable? *Communications of the ACM*, 62(8):20–21, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238337/fulltext.

Weintrop:2019:EBB

[2915] David Weintrop. Education: Block-based programming in computer science education. *Communications of the ACM*, 62(8):22–25, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238340/fulltext.

VanAlstyne:2019:EBD

[2916] Marshall W. Van Alstyne. Economic and business dimensions: A response to fake news as a response to Citizens United. *Communications of the ACM*, 62(8):26–29, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238330/fulltext.

Neville-Neil:2019:KVM

[2917] George V. Neville-Neil. Kode vicious: MUST and MUST NOT. *Communications of the ACM*, 62(8):30–31, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238331/fulltext.

Aiello:2019:VSW

[2918] Marco Aiello. Viewpoint: The success of the web: a triumph of the amateurs. *Communications of the ACM*, 62(8):32–34, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238332/fulltext.

Noy:2019:ISK

[2919] Natasha Noy, Yuqing Gao, Anshu Jain, Anant Narayanan, Alan Patterson, and Jamie Taylor. Industry-scale knowledge graphs: lessons and challenges. *Communications of the ACM*, 62(8):36–43, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238342/fulltext.

Wiedemann:2019:RPD

[2920] Anna Wiedemann, Nicole Forsgren, Manuel Wiesche, Heiko Gewald, and Helmut Krcmar. Research for practice: the DevOps phenomenon. *Communications of the ACM*, 62(8):44–49, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238341/fulltext.

Matsudaira:2019:OA

[2921] Kate Matsudaira. Overly attached. *Communications of the ACM*, 62 (8):50–52, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238343/fulltext.

Grosz:2019:EEI

[2922] Barbara J. Grosz, David Gray Grant, Kate Vredenburgh, Jeff Behrends, Lily Hu, Alison Simmons, and Jim Waldo. Embedded EthiCS: integrating ethics across CS education. *Communications of the ACM*, 62(8):54–61, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238345/fulltext.

Distefano:2019:SSA

[2923] Dino Distefano, Manuel Fähndrich, Francesco Logozzo, and Peter W. O'Hearn. Scaling static analyses at Facebook. *Communications of the ACM*, 62(8):62–70, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238344/fulltext.

Bardram:2019:ACC

[2924] Jakob E. Bardram, Steven Jeuris, Paolo Tell, Steven Houben, and Stephen Voida. Activity-centric computing systems. *Communications of the ACM*, 62(8):72–81, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/8/238346/fulltext.

Ferrara:2019:HDS

[2925] Emilio Ferrara. The history of digital spam. *Communications of the ACM*, 62(8):82–91, August 2019. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/8/238347/fulltext`.

Cormode:2019:TPT

[2926] Graham Cormode. Technical perspective: the true cost of popularity. *Communications of the ACM*, 62(8): 94, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/8/238349/fulltext`.

Larsen:2019:HHC

[2927] Kasper Green Larsen, Jelani Nelson, Huy L. Nguy˜ên, and Mikkel Thorup. Heavy hitters via cluster-preserving clustering. *Communications of the ACM*, 62(8):95–100, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/8/238348/fulltext`.

Bainbridge:2019:LBF

[2928] William Sims Bainbridge. Last byte: Fluid democracy. *Communications of the ACM*, 62(8):104–ff, August 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/8/238350/fulltext`.

Chien:2019:ELS

[2929] Andrew A. Chien. Editor's letter: Sustaining open collaboration in universities. *Communications of the ACM*, 62(9):5, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/9/238953/fulltext`.

Cerf:2019:CP

[2930] Vinton G. Cerf. Cerf's up: Polyglot! *Communications of the ACM*, 62(9):6, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/9/238954/fulltext`.

Vardi:2019:DLG

[2931] Moshe Y. Vardi. Departments: The long game of research. *Communications of the ACM*, 62(9):7, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/9/238955/fulltext`.

Staff:2019:LEBb

[2932] CACM Staff. Letters to the editor: On being 'random enough'. *Communications of the ACM*, 62(9):9, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/9/238956/fulltext`.

Bugayenko:2019:BWP

[2933] Yegor Bugayenko and Mark Guzdial. BLOG@CACM: Why programmers should curb their enthusiasm, and thinking about computational thinking. *Communications of the ACM*, 62(9):10–11, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/9/238957/fulltext`.

Greengard:2019:NIR

[2934] Samuel Greengard. News: An inability to reproduce. *Communications of the ACM*, 62(9):13–15, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238959/fulltext.

Anthes:2019:NAR

[2935] Gary Anthes. News: Augmented reality gets real. *Communications of the ACM*, 62(9):16–18, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238960/fulltext.

Underwood:2019:NCY

[2936] Sarah Underwood. News: Can you locate your location data? *Communications of the ACM*, 62(9):19–21, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238961/fulltext.

Goldman:2019:LTI

[2937] Eric Goldman. Law and technology: Internet immunity and the freedom to code. *Communications of the ACM*, 62(9):22–24, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238962/fulltext.

Orman:2019:PSO

[2938] Hilarie Orman. Privacy and security: Online voting: we can do it! (we have to). *Communications of the ACM*, 62(9):25–27, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238963/fulltext.

Denning:2019:PII

[2939] Peter J. Denning and Andrew Odlyzko. The profession of IT: An interview with Andrew Odlyzko on cyber security. *Communications of the ACM*, 62(9):28–30, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238964/fulltext.

Auerbach:2019:VBL

[2940] David Auerbach. Viewpoint: Bitwise: a life in code. *Communications of the ACM*, 62(9):31–33, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238965/fulltext.

Cox:2019:SSD

[2941] Russ Cox. Surviving software dependencies. *Communications of the ACM*, 62(9):36–43, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238968/fulltext.

Killalea:2019:VSE

[2942] Tom Killalea. Velocity in software engineering. *Communications of the ACM*, 62(9):44–47, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238967/fulltext.

Kfir:2019:DCL

[2943] Shaul Kfir and Camille Fournier. DAML: the contract language of distributed ledgers. *Communications of the ACM*, 62(9):48–54, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238966/fulltext.

Gomes:2019:CSC

[2944] Carla Gomes, Thomas Dietterich, Christopher Barrett, Jon Conrad, Bistra Dilkina, Stefano Ermon, Fei Fang, Andrew Farnsworth, Alan Fern, Xiaoli Fern, Daniel Fink, Douglas Fisher, Alexander Flecker, Daniel Freund, Angela Fuller, John Gregoire, John Hopcroft, Steve Kelling, Zico Kolter, Warren Powell, Nicole Sintov, John Selker, Bart Selman, Daniel Sheldon, David Shmoys, Milind Tambe, Weng-Keen Wong, Christopher Wood, Xiaojian Wu, Yexiang Xue, Amulya Yadav, Abdul-Aziz Yakubu, and Mary Lou Zeeman. Computational sustainability: computing for a better world and a sustainable future. *Communications of the ACM*, 62(9):56–65, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238970/fulltext.

Jackson:2019:ALT

[2945] Daniel Jackson. Alloy: a language and tool for exploring software designs. *Communications of the ACM*, 62(9):66–76, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238969/fulltext.

Freeman:2019:EEB

[2946] Jason Freeman, Brian Magerko, Doug Edwards, Tom Mcklin, Taneisha Lee, and Roxanne Moore. EarSketch: engaging broad populations in computing through music. *Communications of the ACM*, 62(9):78–85, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238972/fulltext.

Gilad:2019:MPC

[2947] Yossi Gilad. Metadata-private communication for the 99%. *Communications of the ACM*, 62(9):86–93, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238971/fulltext.

Lefebvre:2019:VWD

[2948] Sylvain Lefebvre. From virtual worlds to digital fabrication: technical perspective. *Communications of the ACM*, 62(9):96, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238958/fulltext.

Vidimce:2019:OPP

[2949] Kiril Vidimce, Szu-Po Wang, Jonathan Ragan-Kelley, and Wojciech Matusik. OpenFab: a programmable pipeline for multimaterial fabrication. *Communications of the ACM*, 62(9):97–105, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317

(electronic). URL https://cacm.acm.org/magazines/2019/9/238973/fulltext.

Hoffmann:2019:LBI

[2950] Leah Hoffmann. Last byte: Inspired by the home of the future. *Communications of the ACM*, 62(9):112–ff, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/9/238974/fulltext.

Pancake:2019:PHA

[2951] Cherri M. Pancake. From the President: How ACM evolves in response to community needs. *Communications of the ACM*, 62(10):5, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239662/fulltext.

Cerf:2019:CAE

[2952] Vinton G. Cerf. Cerf's up: AI is not an excuse! *Communications of the ACM*, 62(10):7, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239663/fulltext.

Hill:2019:BPVb

[2953] Robin K. Hill and Edwin Torres. BLOG@CACM: Pinning down variables, and taking an agile approach. *Communications of the ACM*, 62(10):8–9, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239665/fulltext.

Monroe:2019:NCQ

[2954] Don Monroe. News: Closing in on quantum error correction. *Communications of the ACM*, 62(10):11–13, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239668/fulltext.

Kirkpatrick:2019:NPI

[2955] Keith Kirkpatrick. News: Protecting industrial control systems. *Communications of the ACM*, 62(10):14–16, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239666/fulltext.

Shein:2019:NCT

[2956] Esther Shein. News: The CS teacher shortage. *Communications of the ACM*, 62(10):17–18, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239667/fulltext.

Cusumano:2019:TSMb

[2957] Michael A. Cusumano. Technology strategy and management: The cloud as an innovation platform for software development. *Communications of the ACM*, 62(10):20–22, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239669/fulltext.

Neumann:2019:IRH

[2958] Peter G. Neumann. Inside risks: How might we increase system trustworthiness? *Communications of the ACM*, 62(10):23–25, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239670/fulltext.

Neville-Neil:2019:KVWb

[2959] George V. Neville-Neil. Kode vicious: What is a chief security officer good for? *Communications of the ACM*, 62(10):26–27, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239671/fulltext.

White:2019:VMD

[2960] Ryen W. White, Adam Fourney, Allen Herring, Paul N. Bennett, Nirupama Chandrasekaran, Robert Sim, Elnaz Nouri, and Mark J. Encarnación. Viewpoint: Multi-device digital assistance. *Communications of the ACM*, 62(10):28–31, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239672/fulltext.

Frazelle:2019:OSF

[2961] Jesse Frazelle. Open source firmware. *Communications of the ACM*, 62(10):34–38, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239673/fulltext.

Limoncelli:2019:DDC

[2962] Thomas A. Limoncelli. Demo data as code. *Communications of the ACM*, 62(10):39–41, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239675/fulltext.

Matsudaira:2019:EM

[2963] Kate Matsudaira. The evolution of management. *Communications of the ACM*, 62(10):42–47, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239674/fulltext.

Hastings:2019:UDI

[2964] Justine S. Hastings, Mark Howison, Ted Lawless, John Ucles, and Preston White. Unlocking data to improve public policy. *Communications of the ACM*, 62(10):48–53, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239676/fulltext.

Salzman:2019:SBR

[2965] Oren Salzman. Sampling-based robot motion planning. *Communications of the ACM*, 62(10):54–63, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239677/fulltext.

Mankoff:2019:CGF

[2966] Jennifer Mankoff, Megan Hofmann, Xiang 'Anthony' Chen, Scott E. Hudson, Amy Hurst, and Jeeeun Kim. Consumer-grade fabrication and its potential to revolutionize accessibility. *Communications of the ACM*, 62(10):64–75, October 2019. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239679/fulltext.

Hallen:2019:PDP

[2967] Mark A. Hallen and Bruce R. Donald. Protein design by provable algorithms. *Communications of the ACM*, 62(10):76–84, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239678/fulltext.

Appel:2019:SCT

[2968] Andrew W. Appel. The scalability of CertiKOS: technical perspective. *Communications of the ACM*, 62(10):88, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239664/fulltext.

Gu:2019:BCC

[2969] Ronghui Gu, Zhong Shao, Hao Chen, Jieung Kim, Jérémie Koenig, Xiongnan (Newman) Wu, Vilhelm Sjöberg, and David Costanzo. Building certified concurrent OS kernels. *Communications of the ACM*, 62(10):89–99, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239680/fulltext.

Shasha:2019:LBD

[2970] Dennis Shasha. Last byte: Dust wars. *Communications of the ACM*, 62(10):104–ff, October 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/10/239681/fulltext.

Cerf:2019:CHI

[2971] Vinton G. Cerf. Cerf's up: Hazards of the information superhighway. *Communications of the ACM*, 62(11):5, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240376/fulltext.

Vardi:2019:DWT

[2972] Moshe Y. Vardi. Departments: The winner-takes-all tech corporation. *Communications of the ACM*, 62(11):7, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240377/fulltext.

Staff:2019:LEY

[2973] CACM Staff. Letters to the editor: You can publish it!: (you have to). *Communications of the ACM*, 62 (11):8–9, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240378/fulltext.

Bugayenko:2019:BBI

[2974] Yegor Bugayenko. BLOG@CACM: The benefits of indolence. *Communications of the ACM*, 62(11):10–11, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240379/fulltext.

Monroe:2019:NIP

[2975] Don Monroe. News: Information is physics. *Communications of the ACM*, 62(11):13–15, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240356/fulltext`.

Greengard:2019:NWD

[2976] Samuel Greengard. News: When drones fly. *Communications of the ACM*, 62(11):16–18, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240357/fulltext`.

Kugler:2019:NRW

[2977] Logan Kugler. News: Real-world applications for drones. *Communications of the ACM*, 62(11):19–21, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240355/fulltext`.

Samuelson:2019:LSE

[2978] Pamela Samuelson. Legally speaking: Europe's controversial digital copyright directive finalized. *Communications of the ACM*, 62(11):24–27, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240358/fulltext`.

Guzdial:2019:ECT

[2979] Mark Guzdial, Alan Kay, Cathie Norris, and Elliot Soloway. Education: Computational thinking should just be good thinking. *Communications of the ACM*, 62(11):28–30, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240359/fulltext`.

Varghese:2019:IIL

[2980] George Varghese. Interview: An interview with Leonard Kleinrock. *Communications of the ACM*, 62(11):31–36, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240360/fulltext`.

Silva:2019:VAP

[2981] Selena Silva and Martin Kenney. Viewpoint: Algorithms, platforms, and ethnic bias. *Communications of the ACM*, 62(11):37–39, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240361/fulltext`.

Narayanan:2019:IRS

[2982] P. J. Narayanan, Pankaj Jalote, and Anand Deshpande. India region special section: Welcome to the India region special section. *Communications of the ACM*, 62(11):40–42, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240362/fulltext`.

Varma:2019:IRS

[2983] Manik Varma. India region special section: Hot topics: Extreme classification. *Communications of the ACM*, 62(11):44–45, November 2019. CODEN

CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240371/fulltext.

Mustafa:2019:IRS

[2984] Maryam Mustafa, Amna Batool, and Agha Ali Raza. India region special section: Hot topics: Designing ICT interventions for women in Pakistan. *Communications of the ACM*, 62 (11):46–47, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240370/fulltext.

Haritsa:2019:IRS

[2985] Jayant R. Haritsa and S. Sudarshan. India region special section: Hot topics: Turbocharging database query processing and testing. *Communications of the ACM*, 62(11):48–49, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240363/fulltext.

Verma:2019:IRS

[2986] Neeta Verma and Savita Dawar. India region special section: Hot topics: Digital transformation in the Indian government. *Communications of the ACM*, 62(11):50–53, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240364/fulltext.

Shah:2019:IRS

[2987] Vipul Shah. India region special section: Hot topics: CSpathshala: bringing computational thinking to schools. *Communications of the ACM*, 62(11): 54–55, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240365/fulltext.

Samaranayake:2019:IRS

[2988] Ajit Samaranayake, Sampath Tilakumara, Thayaparan Sripavan, and Rasika Withanawasam. India region special section: Hot topics: Creative disruption in fintech from Sri Lanka. *Communications of the ACM*, 62(11):56–57, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240368/fulltext.

Jawahar:2019:IRS

[2989] C. V. Jawahar and Venkata N. Padmanabhan. India region special section: Hot topics: Technology interventions for road safety and beyond. *Communications of the ACM*, 62 (11):58–59, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240366/fulltext.

Srikant:2019:IRS

[2990] Shashank Srikant, Rohit Takhar, Vishal Venugopal, and Varun Aggarwal. India region special section: Hot topics: Skill evaluation. *Communications of the ACM*, 62(11): 60–61, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240369/fulltext.

Shroff:2019:IRS

[2991] Gautam Shroff and K. Ananth Krishnan. India region special section: Hot topics: Computing research at Tata Consultancy Services. *Communications of the ACM*, 62(11): 62–63, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240367/fulltext`.

Jalote:2019:IRS

[2992] Pankaj Jalote and Pari Natarajan. India region special section: Big trends: The growth and evolution of India's software industry. *Communications of the ACM*, 62(11): 64–69, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240381/fulltext`.

Bhattacharyya:2019:IRS

[2993] Pushpak Bhattacharyya, Hema Murthy, Surangika Ranathunga, and Ranjiva Munasingh. India region special section: Big trends: Indic language computing. *Communications of the ACM*, 62(11):70–75, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240372/fulltext`.

Raghavan:2019:IRS

[2994] Vivek Raghavan, Sanjay Jain, and Pramod Varma. India region special section: Big trends: India stack — digital infrastructure as public good. *Communications of the ACM*, 62(11): 76–81, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240375/fulltext`.

Banerjee:2019:IRS

[2995] Subhashis Banerjee and Subodh Sharma. India region special section: Big trends: Privacy concerns with Aadhaar. *Communications of the ACM*, 62(11):80, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240384/fulltext`.

Assisi:2019:IRS

[2996] Charles Assisi, Avinash Raghava, and NS Ramnath. India region special section: Big trends: The rise of the Indian start-up ecosystem. *Communications of the ACM*, 62(11): 82–87, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240374/fulltext`.

Chakraborty:2019:IRS

[2997] Supratik Chakraborty and Vasudeva Varma. India region special section: Big trends: Highlights of software R&D in India. *Communications of the ACM*, 62(11):88–91, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240383/fulltext`.

Mahajan:2019:IRS

[2998] Meena Mahajan, Madhavan Mukund, and Nitin Saxena. India region special section: Big trends: Research in theoretical computer science. *Communications of the ACM*, 62(11): 92–95, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240380/fulltext`.

Ganguly:2019:IRS

[2999] Niloy Ganguly and Ponnurangam Kumaraguru. India region special section: Big trends: The positive and negative effects of social media in India. *Communications of the ACM*, 62 (11):98–99, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240373/fulltext`.

Vashistha:2019:IRS

[3000] Aditya Vashistha, Umar Saif, and Agha Ali Raza. India region special section: Big trends: The Internet of the orals. *Communications of the ACM*, 62 (11):100–103, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240382/fulltext`.

Vaccaro:2019:EMM

[3001] Michelle Vaccaro and Jim Waldo. The effects of mixing machine learning and human judgment. *Communications of the ACM*, 62(11): 104–110, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240386/fulltext`.

Helland:2019:TOB

[3002] Pat Helland. The trade-offs between write and read. *Communications of the ACM*, 62(11):111–113, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240385/fulltext`.

Appuswamy:2019:FMR

[3003] Raja Appuswamy, Goetz Graefe, Renata Borovica-Gajic, and Anastasia Ailamaki. The five-minute rule 30 years later and its impact on the storage hierarchy. *Communications of the ACM*, 62 (11):114–120, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240388/fulltext`.

Pei:2019:EIK

[3004] Yan Pei, Swarnendu Biswas, Donald S. Fussell, and Keshav Pingali. An elementary introduction to Kalman filtering. *Communications of the ACM*, 62 (11):122–133, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240389/fulltext`.

Andersen:2019:WSB

[3005] David G. Andersen. A whitebox solution for blackbox-like behaviors: technical perspective. *Communications of the ACM*, 62(11):136, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/11/240387/fulltext`.

Pei:2019:DAW

[3006] Kexin Pei, Yinzhi Cao, Junfeng Yang, and Suman Jana. DeepXplore: automated whitebox testing of deep learning systems. *Communications of the ACM*, 62(11):137–145, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240390/fulltext.

Anonymous:2019:LBC

[3007] Anonymous. Last byte: Cantando con la corrente (singing with current). *Communications of the ACM*, 62 (11):160–ff, November 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/11/240391/fulltext.

Pancake:2019:ELE

[3008] Cherri M. Pancake. Editor's letter: Engaging future generations of ACM leaders. *Communications of the ACM*, 62(12):5, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241060/fulltext.

Cerf:2019:CHF

[3009] Vinton G. Cerf. Cerf's up: A hands-free ride. *Communications of the ACM*, 62(12):7, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241061/fulltext.

Staff:2019:LEO

[3010] CACM Staff. Letters to the Editor: Online voting still security pipedream. *Communications of the ACM*, 62 (12):9, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241062/fulltext.

Guzdial:2019:BGH

[3011] Mark Guzdial and Robin K. Hill. BLOG@CACM: Getting high school, college students interested in CS. *Communications of the ACM*, 62(12): 10–11, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241063/fulltext.

Edwards:2019:NMM

[3012] Chris Edwards. News: Malevolent machine learning. *Communications of the ACM*, 62(12):13–15, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241047/fulltext.

Marks:2019:NRA

[3013] Paul Marks. News: Robots aim to boost astronaut efficiency. *Communications of the ACM*, 62(12): 16–18, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241064/fulltext.

Kirkpatrick:2019:NRI

[3014] Keith Kirkpatrick. News: Regulating information technology. *Communications of the ACM*, 62(12): 19–21, December 2019. CODEN CACMA2. ISSN 0001-0782 (print),

1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241065/fulltext.

Douglas:2019:CES

[3015] David M. Douglas. Computing ethics: Should researchers use data from security breaches? *Communications of the ACM*, 62(12):22–24, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241048/fulltext.

Neville-Neil:2019:KVKb

[3016] George V. Neville-Neil. Kode vicious: Koding academies. *Communications of the ACM*, 62(12):25, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241049/fulltext.

Denning:2019:PIU

[3017] Peter J. Denning and Ted G. Lewis. The profession of IT: Uncertainty. *Communications of the ACM*, 62(12):26–28, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241050/fulltext.

Noveck:2019:VPE

[3018] Beth Simone Noveck. Viewpoint: Public entrepreneurship and policy engineering. *Communications of the ACM*, 62(12):29–31, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241051/fulltext.

Mirian:2019:HH

[3019] Ariana Mirian. Hack for hire. *Communications of the ACM*, 62(12):32–37, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241053/fulltext.

Limoncelli:2019:API

[3020] Thomas A. Limoncelli. API practices if you hate your customers. *Communications of the ACM*, 62(12):38–42, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241052/fulltext.

Castro:2019:RSC

[3021] Paul Castro, Vatche Ishakian, Vinod Muthusamy, and Aleksander Slominski. The rise of serverless computing. *Communications of the ACM*, 62(12):44–54, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241054/fulltext.

LeGoues:2019:APR

[3022] Claire Le Goues, Michael Pradel, and Abhik Roychoudhury. Automated program repair. *Communications of the ACM*, 62(12):56–65, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL https://cacm.acm.org/magazines/2019/12/241055/fulltext.

Tennenholtz:2019:RSE

[3023] Moshe Tennenholtz and Oren Kurland. Rethinking search engines and recommendation systems: a game theoretic perspective. *Communications of the ACM*, 62(12):66–75, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/12/241056/fulltext`.

Taylor:2019:BFO

[3024] Michael B. Taylor. Bootstrapping a future of open source, specialized hardware: technical perspective. *Communications of the ACM*, 62(12):78, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/12/241057/fulltext`.

Balkind:2019:OOS

[3025] Jonathan Balkind, Michael McKeown, Yaosheng Fu, Tri Nguyen, Yanqi Zhou, Alexey Lavrov, Mohammad Shahrad, Adi Fuchs, Samuel Payne, Xiaohua Liang, Matthew Matl, and David Wentzlaff. OpenPiton: an open source hardware platform for your research. *Communications of the ACM*, 62(12):79–87, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/12/241058/fulltext`.

Hoffmann:2019:LBRb

[3026] Leah Hoffmann. Last byte: RISCy beginnings. *Communications of the ACM*, 62(12):96–ff, December 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `https://cacm.acm.org/magazines/2019/12/241059/fulltext`.