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Title word cross-reference

$150$ [1852]. 3 [1862]. $N$ [24]. $O_2$ [226]. $p \times 64$ [164].

- Fold [24].


3.0 [1650]. 3D [1689, 331, 458].

4 [439]. 400 [918]. 47s [1833].

5 [582]. 50th [980].

'89 [26].

'90s [1203]. '92 [39]. '95 [779]. '96 [965].

9X [398, 399, 397].

= [1396, 186].


Apprenticing [838]. Approach [1031, 380, 73, 381, 880, 592, 286, 1801, 509, 1897, 1689, 1922, 1651, 1754, 18, 370, 22, 1894, 657, 586, 7, 847, 240, 1499, 318, 656, 49, 619, 200, 1754, 1631, 1761, 1519, 1749, 1594, 617, 615].

Approaches [959, 349, 1254, 704, 1553, 1529]. approved [1902]. Approximate [1183]. apps [1912].


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belong [583]. Beltway [1249].

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[199, 265, 377, 445, 580, 834, 950, 29, 1220, 874, 1042, 1715, 149, 1623, 1472].
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[1282, 1802, 166, 1519]. full-motion [166]. full-text [1519]. Fun [1099]. Function
[1106, 1107, 970, 441]. functional [211, 911]. Functions [1386, 273, 230]. fund [1064].
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[1237, 1218, 1241, 1242, 1243, 1234, 1240, 1236, 291, 1233, 849, 1238, 1232, 1204, 1239, 1115, 389, 1235, 1941, 1323, 334, 175, 486, 1698, 391, 489, 786, 1460]. Fuzzy
[631, 632, 513]. FY [66].

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[1101, 18, 1042]. Gammon [800]. gap
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[1056, 196, 621, 1523, 278]. general-purpose [1523]. generalize [292].
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[776, 1178, 534, 777]. generic [344]. Genetic
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[238, 1918]. Geographic [270, 1288, 1782].
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[1046, 774, 995]. GeoRoute
[270]. Gerasch [146]. Germany [772].
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[708, 757]. Gigabit [1335]. gigabyte [1860].
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[695, 429, 1417, 968, 883, 543, 1656].
Globalization [130]. Globalizing [1237].
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[1850, 1701, 1019, 1082, 1546]. Goal-Based
[1019]. Goal-Oriented [1701]. goals
[866, 784, 1376, 602]. Goes [1040, 1328].
Going [829]. Gold [1159, 1494]. gone
[1315]. Good [1266, 1732, 607, 1117, 1748].
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[1782]. Grace [1368, 766, 310]. gradient
[107]. Graduate [761]. Graham [1541].
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[1182, 657, 549]. graph-based [657].
Graphic [503]. Graphical
[749, 457, 456, 752, 851]. Graphics
[1100, 193, 1859, 1855]. Graphs [645].
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group-enabled [686]. GroupLens [1262].
Groups [760, 1734]. Groupware
[132, 608, 861]. Growing [1864, 1206, 1543].
Grows [1190, 138]. Growth [697, 459].
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Guard-All [648]. Guest
[1198, 160, 353, 520, 948]. Guide
[494, 339, 1936, 493, 750, 1089, 983].
guidelines [1400, 282]. Gulf [1490].

h [1000]. Habanero [1571]. Hackers [1764].
hacking [946, 150]. Hairiest [1279]. Haiti
[1820]. Halpern [1373]. Hand [522].
Handling [1202]. hands [1853]. Hanging
[1074]. Happen [1230]. Happenings [540].
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[1778, 1465, 111, 1214, 272, 1777, 1775, 1774].
Harmful [844]. Harmonic [1185].
harmony [88]. hash [273]. Hashing
[244, 246, 247, 245, 64, 63]. Hassles [872].
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[1633, 262, 1359, 1361, 1348, 1942, 1346].

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[1334]. Present [840, 291, 489]. presented
[1124]. President [1812, 1076, 56, 948, 1891,
1699, 87, 234, 386, 779, 913, 965]. Presper
[896]. Press [1764, 983, 1295]. Price
[1089, 1274, 1467, 596]. Pricing [1364].
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[157]. priorities [1477]. Privacy
[545, 1900, 1130, 1341, 959, 720, 1361, 956,
597, 955, 279, 1723, 1724, 1718, 548, 1715,
1722, 312, 546, 547, 1498]. Private
[199, 789]. Probabilistic [62]. probability
[797]. Probe [1106]. Problem
[1888, 1026, 137, 1488, 655, 510, 74, 204].
problem-solving [204]. Problems
[695, 1180, 704, 641, 1546, 298, 1899, 338,
1605, 513]. Procedure [843, 21, 53].
procedures [1376]. Proceedings [971].
Process [998, 365, 1432, 1389, 1153, 577,
848, 1799, 592, 1567, 1741, 366, 1484, 881,
301, 572, 303, 658]. Processes
[775, 714, 1546, 1548, 1686]. Processing
[940, 974, 976, 972, 78, 118, 1124, 336, 973,
1714, 1543]. Processor [165, 51, 124].
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[1497]. Productivity
[909, 1148, 594, 1612, 1613, 134, 830].
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[345, 1617, 686, 841, 1117, 308]. Profess
[1010]. profession [1323]. Professional
[723, 234, 323, 1369]. Professionals
[147, 1551]. Professor [1040]. Profiling
[136, 1574]. profit [1773]. Program
[1094, 655, 1101, 1135, 76, 567, 1418, 1723].
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[1776, 1503]. Programmer [1150, 1371,
1191, 1267, 102, 191, 266, 376, 454, 539, 639,
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Programmiersprache [1948].
Programming
[555, 719, 428, 1012, 939, 843, 1810, 1948,
1282, 294, 1950, 293, 1668, 325, 33, 1450, 97,
218, 981, 561, 69, 556, 30, 852, 1924, 295, 893,

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559, 1913, 564, 1504, 851, 656, 1531, 681, 854].
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[398, 569, 1909, 825, 1070, 824, 885, 433,
1631, 570, 571, 1687, 1772, 295, 1908, 1591,
479, 572, 1918, 1751, 1931, 822, 918, 1188,
998, 238, 185, 821, 449]. Project-based
[1631]. project-specific [1687].
projections [313]. Projects
[1334, 1385, 1309, 1207, 495, 1647, 1578, 505,
1670, 1524, 826, 1727, 1574]. Prolog
[70, 297]. Prologue [4]. Promise [916].
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[950, 1003, 947, 746, 968, 148, 328, 1732].
proposal [1923, 343]. Proposed [1269, 342].
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[1082]. Protect [1075]. Protected [738].
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Protocol [701, 1923, 737]. protocols [783].
Prototypes [1118, 500]. Prototyping
[106, 992, 639, 892, 506, 502]. prover [178].
provide [1369, 1436]. providers [1611, 183].
Providing [1183, 701]. Pseudo [777].
Pseudo-Random [777]. Psychometrics
[1355]. Public [1591, 624, 609, 1606, 1519].
Publication [196, 1209]. publications
[984, 1296]. Publishable [1203]. published
[1291, 1295]. Publishing
[1088, 1069, 794, 1697, 150, 831, 1901, 1525].
pumping [453]. purchase [1461]. purpose
[1523]. Putting [162, 1924, 253, 158].
puzzle [340].
Qaulity [970]. Quagmire [1159]. Quality
[1481, 1308, 1162, 1319, 1707, 1316, 585,
1317, 1318, 1482, 1483, 1615, 1479, 1480].
Quandary [956]. Quantum [1319]. Query
[1183]. Quest [1468]. question [1438].
Questioned [581]. Questioning
[1474, 1269]. Questions [907, 692, 855].
Queueing [1184]. Quick [142]. Quo [1775].


Undergraduate [394, 1054].

Uncertainties [145, 1794, 91, 376, 655, 1409, 383, 653, 416, 79]. Unexpected [181].

Unified [877, 1655]. Unifying [91, 1539].

Union [568]. Unique [1810]. Unit [436].


unknown [1731]. Unraveling [910].

unwanted [1502]. Update [1089, 256, 1641].


Usability [1733, 1803, 1797, 1801, 1796, 1802, 644].


used [1147, 1942]. Useful [1153, 134].


User-Centered [817, 1330, 1618].

user-interface [1528]. user-tailored [318].

Users [1935, 1636, 604, 1551, 1377, 514].


Vadis [1775]. Validation [586]. Value [1418, 1697, 848, 1587, 1206, 830].

Value-added [1697]. Values [50, 959, 197].


Verification [1186]. verify [1837]. Versus [914].

Very [311, 85]. Via [1873, 477].

Victory [1093]. Video
[1510, 1194, 1813, 1511]. worry [1929].


Y2K [1788, 1626, 1850, 1943, 1725, 1872, 1641, 1828, 1805, 1875]. Yaksha [1008].
Yin [1530]. Yu [326].

Zealand [1016]. zone [813].

References


Padmanabhan:1990:CSM

Freeman-Benson:1990:ICS

Sibley:1990:ENI

Chung:1990:DAH

Gait:1990:PSM

Carta:1990:TFI

Press:1990:WMS

Hoadley:1990:IEC

Batra:1990:CRR


REFERENCES


REFERENCES


REFERENCES


Rohde:1990:DRP


Swanson:1990:DSD


Pugh:1990:SLP

[62] William Pugh. Skip lists: a probabilistic alternative to balanced trees. Communications of the ACM, 33(6):668–676, June 1990. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://www.acm.org/pubs/toc/Abstracts/0001-0782/78976.html. This paper presents skip lists, a list in which a node may have a pointer to a node some number of places ahead of it on the list. Such pointers, called “forward pointers”, therefore “skip” over intermediate nodes. A node with \( k \) forward pointers is said to be a level \( k \) node. Skip lists are probabilistic in that the level of a node is chosen randomly with the property that a node’s \( i \)th forward pointer points to the next node of level \( i \) or higher. It is shown that skip lists can efficiently implement abstract data types such as dictionaries and ordered lists in that the expected time to search for an item is \( O(\log n) \).

Pearson:1990:FHV


Kumar:1990:COE


Press:1990:PCS


Crawford:1990:WBF

REFERENCES


REFERENCES


[116] Amy Pearl, Martha E. Pollack, Eve Riskin, Becky Thomas, Elizabeth Wolf,


[126] Barton P. Miller, Lars Fredriksen, and Bryan So. An empirical study of the reliability of UNIX utilities. *Communications of the ACM*, 33(12):32–44, December 1990. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL ftp://grilled.cs.wisc.edu/technical_papers/fuzz-revisited.ps; ftp://grilled.cs.wisc.edu/technical_papers/fuzz.ps; http://www.acm.org/pubs/toc/Abstracts/0001-0782/96279.html. This is a fascinating paper on what happens when random input streams are fed into important UNIX utilities on several commercial UNIX systems. In some cases, the tests were able to crash the entire operating system. In 1995, a (sadly, unpublished) followup study showed that many of the failures diagnosed in 1990 still had not been repaired in the commercial systems, and that the GNU implementations were generally more robust. Both 1990 and 1995 papers, and the fuzz-generating software, are available at the authors’ FTP site at ftp://grilled.cs.wisc.edu/technical_papers/fuzz.ps and ftp://grilled.cs.wisc.edu/technical_papers/fuzz-revisited.ps.


REFERENCES


Clemons:1991:ESI


Ellis:1991:GSI


Gurbaxani:1991:IIS


Gould:1991:MUU


Jarvenpaa:1991:SDD


Eerkes:1991:PCS


Lamport:1991:MEP


Neumann:1991:IRCa

REFERENCES


REFERENCES


REFERENCES


[Blostein:1991:JPM]


[Neumann:1991:IRP]


[Fox:1991:GEI]


[Wallace:1991:JSP]


[Cockroft:1991:NPJ]


[LeGall:1991:MVC]


[Liou:1991:OKV]


[187] Enn Tyugu. Three new-generation software environments. *Communications of the ACM*, 34(6):46–59, June 1991. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://www.acm.org/pubs/toc/Abstracts/0001-0782/103708.html. The system PRIZ has been under development at the Institute of Cybernetics, Tallinn, Estonia since mid-seventies. This article describes three environments of different sophistication based on this system: ExpertPRIZ, a simple expert system shell; C-PRIZ, a language integrating imperative programming (C); and NUT (New UTopist; Utopist was the initial programming language of PRIZ), an object-oriented environment.

Data elements in Utopist (attributes of objects) can be bound by both inter- and intra-object relations. These rela-
tions are used by a propositional theorem prover to generate a proof that it is possible to compute a certain datum given some other data. This (constructive) proof is used to synthesize a program which computes the datum. So PRIZ has a quite non-standard logic component: compile-time proof and program generation instead of run-time clause resolution. These technique are called Propositional Logic Programming and Structural Program Synthesis. NUT is a prototype-based (as opposed to class-based) language: any object can be used as a template (type) for a new object (and of course as a component of a new object). Limited polymorphism is supported through a generic type (any). It is notable that some of the modern programming paradigms (constraint programming, object-orientation, employing logic in computation) have been considered so early.


REFERENCES


Nunamaker:1991:EMS


George:1991:ECC


Phillips:1991:MGM


Neumann:1991:IRCe


Wilkes:1991:CPR


Barlow:1991:EFP


Schoppers:1991:RTK


Chandrasekaran:1991:RTD

Payton:1991:IRT


Kohn:1991:DCA


Paul:1991:RPS


Bersoff:1991:ILC


Rosenberg:1991:IRM


Goodman:1991:IPU


Soloway:1991:LEH

REFERENCES


[Stewart:1991:BNS]

[Corbato:1991:BSW]

[Frenkel:1991:IFJ]

[Neumann:1991:IRA]

[Wilkes:1991:CPC]

[Samuelson:1991:LSD]

[Cattell:1991:NGD]

[Deux:1991:S]

[Lamb:1991:ODS]
Charles Lamb, Gordon Landis, Jack Orenstein, and Dan Weinreb. The
REFERENCES


Butterworth:1991:GOD


Stonebraker:1991:PNG


Lohman:1991:ESO


Silberschatz:1991:DSA


Simons:1991:RAR


Weissman:1991:IRN


White:1991:PLM

REFERENCES

Gore:1991:VHP


Crawford:1991:WSP


Lander:1991:RCM


Frenkel:1991:MSA


Pancake:1991:SSP


Newcomb:1991:HHT


Newborn:1991:ANA


Silverman:1991:MDC

REFERENCES

Lumpp:1991:CCA

Dittmer:1991:NFH

Savoyn:1991:NFH

Litsios:1991:NFH

Pearson:1991:NFH

Neumann:1991:IRH


Goodman:1991:IPC

Grudin:1991:CI


Ishii:1991:TOS


Francik:1991:PIW


Kyng:1991:DCC


Perin:1991:ESF


Rosenberg:1991:UNS


Kling:1991:CCC

REFERENCES


REFERENCES


[273] Edward A. Fox, Lenwood S. Heath, Qi Fan Chen, and Amjad M. Daoud. Practical minimal perfect hash functions for large databases. *Communications of the ACM*, 35(1):105–121, January 1992. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL http://www.acm.org/pubs/toc/Abstracts/0001-0782/129623.html. This is the first published algorithm for computing minimal perfect hash functions for lists of millions of words; previous algorithms were computationally infeasible for more than a few hundred words.

REFERENCES


REFERENCES


REFERENCES


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REFERENCES


REFERENCES

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

Neumann:1992:ACL

Wilkes:1992:CPA

Goodman:1992:CME

Bell:1992:UTB

Creecy:1992:TMM

Kennedy:1992:GEI

Hiranandani:1992:CFD

Cann:1992:RFD
REFERENCES


Nerson:1992:AOO


Curtis:1992:PM


Krasner:1992:LLS


Korson:1992:MES


Navathe:1992:EDM


Chandrasekaran:1992:TSA


Krishnan:1992:KBM


Page-Jones:1992:CTM


[387] Peter Likins. Viewpoint: a breach of the social contract. *Communications of


REFERENCES


[413] Peter W. Foltz and Susan T. Dumais. Personalized information delivery: An

Goldberg:1992:UCF


Bowen:1992:DA


Ram:1992:NLU


Denning:1992:ENE


LaMalva:1992:APC


Neumann:1992:IRAb


Samuelson:1993:LSL


Bly:1993:MWM

[421] Sara A. Bly, Steve R. Harrison, and Susan Irwin. Multimedia in the workplace: Media spaces: Bringing people together in a video, audio, and


REFERENCES

Katz:1993:TF


Sites:1993:BT


Dobberpuhl:1993:DE


Hollingsworth:1993:AST


Kemerer:1993:RFP


Anderson:1993:UNA


Neumann:1993:IRD


Grover:1993:ITE


Barlow:1993:EFB

REFERENCES


REFERENCES


Grudin:1993:IEC


Martin:1993:MAT


Norman:1993:IRU


Beach:1993:BF


Grosch:1993:FDM


Press:1993:PCT


Soloway:1993:LER


Soloway:1993:IIT


Hawkins:1993:TOS


REFERENCES


[489] Braun:1993:HAS


[489] Conn:1993:SS

[489] Perl:1993:ATF
REFERENCES


REFERENCES


[505] Kaj Grønbaek, Morten Kyng, and Preben Mogensen. CSCW challenges: cooperative design in engineering projects. *Communications of the
REFERENCES

Harker:1993:UPP


Kensing:1993:PST


Mumford:1993:EA


Floyd:1993:SMA


Katzenberg:1993:WLA


Blomberg:1993:WOD


Novick:1993:PCP


Wagner:1993:WFP

and persons having to do with surgery
in a large hospital.

Williams:1993:TBS

[514] Marian G. Williams and Vivienne
Begg. Translation between soft-
ware designers and users. Communica-
tions of the ACM, 36(6):102–
103, June 1993. CODEN CACMA2.
ISSN 0001-0782 (print), 1557-7317
acm.org/pubs/toc/Abstracts/0001-
0782/214831.html.

Neumann:1993:IRM

[515] Peter G. Neumann. Inside RISKS:
Modeling and simulation. Communi-
tcations of the ACM, 36(6):124,
June 1993. CODEN CACMA2.
ISSN 0001-0782 (print), 1557-7317
acm.org/pubs/toc/Abstracts/0001-
0782/163293.html.

Brown:1993:LYT

[516] Judith R. Brown. Looking toward the
year 2000. Communications of the
ACM, 36(7):13–14, July 1993. CODEN
CACMA2. ISSN 0001-0782 (print),
www.acm.org/pubs/toc/Abstracts/
0001-0782/159548.html.

Angell:1993:ILB

[517] Ian O. Angell. Intelligence: log-
ical or biological. Communications
of the ACM, 36(7):15–16, 119,
ISSN 0001-0782 (print), 1557-7317
acm.org/pubs/toc/Abstracts/0001-
0782/159550.html.

Steele:1993:FCE

[518] Guy L. Steele, Jr., Danny Hillis,
Richard Stallman, Gerald J. Suss-
man, Marvin Minsky, John McCarthy,
John Backus, Fernando Corbató, and
Ronald E. Anderson. Forum: Code of
ethics reconsidered. Communications
CODEN CACMA2. ISSN 0001-0782
(print), 1557-7317 (electronic).

Wilkes:1993:CPF

[519] Maurice V. Wilkes. Computing per-
spectives: From Fortran and Algol
to object-oriented languages. Commu-
nications of the ACM, 36(7):21–
ISSN 0001-0782 (print), 1557-7317
acm.org/pubs/toc/Abstracts/0001-
0782/159553.html.

Wellner:1993:GEI

[520] Pierre Wellner, Wendy Mackay, and
Rich Gold. Guest editors’ introduc-
tion to the special issue on com-
puter-augmented environments: Back to
the real world. Communications of the
CACMA2. ISSN 0001-0782 (print),
www.acm.org/pubs/toc/Abstracts/
0001-0782/159555.html.

Spreitzer:1993:SSM

Scalable, secure, mobile computing
with location information. Communi-
tcations of the ACM, 36(7):27,
ISSN 0001-0782 (print), 1557-7317


Scott Elrod, Gene Hall, Rick Costanza, Michael Dixon, and Jim Des Rivières.


[539] Marc Rettig, Gary Simons, and John Thomson. Practical programmer: Extended objects. *Commu-
REFERENCES

Weingarten:1993:WHH


Ishida:1993:ISI


Bush:1993:FTT


Murray:1993:KNG


Sadowsky:1993:NCD


Kent:1993:IPE


Rotenberg:1993:CPI


Tuerkheimer:1993:UPP

Hiramatsu:1993:PTP


Schwartz:1993:DSI


Hesse:1993:RSC


Neumann:1993:IRRe


Hoffman:1993:CC


Samuelson:1993:LSC


Press:1993:PCB


Anonymous:1993:ISI


Cohen:1993:COO


REFERENCES


[Nissenbaum:1994:CA]


[Collins:1994:HGG]


[Dorsett:1994:IRR]


[Soloway:1994:LEW]


[Gronbaek:1994:HSD]

Halasz:1994:DHR


Gronbaek:1994:DID


Hardman:1994:AHM


Gronbaek:1994:CHS


Leggett:1994:VDO


Rivlin:1994:NHD


Salton:1994:ASR


Vanthienen:1994:TCM

REFERENCES


Shieber:1994:LRT


Loebner:1994:R


Shieber:1994:LL


LaMalva:1994:APC


Neumann:1994:IRRb


Riecken:1994:IA


Minsky:1994:CMM


Maes:1994:ARW


REFERENCES


REFERENCES


REFERENCES


REFERENCES


Wild:1994:FSS


Wright:1994:IRV


BloomBecker:1994:VMT


Nejmeh:1994:IST


Ganesan:1994:SC


Anderson:1994:WCF


Needham:1994:DSE

REFERENCES


REFERENCES


REFERENCES


REFERENCES

Oechtering:1995:Sam

Vessey:1995:CTC

Mehlhorn:1995:LPC

Long:1995:USD

Herring:1995:TCR

Ross:1995:TCP

Shneiderman:1995:IRI

Zweben:1995:PLA
Weingarten:1995:WRT


Rada:1995:SSS


Vetter:1995:ICA


Vetter:1995:ACA


Kim:1995:ANG


Stevenson:1995:SCA


Schnepf:1995:BFM


Iwata:1995:ACT

Perlo:1995:ITP


Fotedar:1995:AVP


LaMalva:1995:APC


Debest:1995:TCR


Buhr:1995:TCS


Demchak:1995:IRC


Press:1995:PCI


Heckerman:1995:RWA


Heckerman:1995:BN

REFERENCES


[Burnell:1995:SCM]


[Kraut:1995:CSD]


[Walstrom:1995:FMI]

REFERENCES


**Neumann:1995:RCD**


**Samuelson:1995:LSC**


**Fox:1995:DLI**


**Rao:1995:RID**


**Bell:1995:MRS**


**Croft:1995:NCI**

REFERENCES


REFERENCES


Olson:1995:ALR


Christel:1995:IDV


SDLG:1995:SDL


Wilensky:1995:UBD


Smith:1995:ADL


Schatz:1995:BII


Crum:1995:UMD

REFERENCES


Becker:1995:LCD


Marchionini:1995:RDL


Levy:1995:GDL


Wiederhold:1995:DLV


Denning:1995:AEP


Denning:1995:IRI


Robbins:1995:VTT


Barlow:1995:EFD

REFERENCES


REFERENCES

Dumas:1995:DWP

Stacy:1995:CBS

Winograd:1995:PEE

Frakes:1995:SQA

Gagliano:1995:AAC

Kim:1995:CDM

Abelson:1995:FCC

Horwitz:1995:FCC
Compeau:1995:EUT


Nelson:1995:AEU


Carroll:1995:MEG


Fitzgerald:1995:CTB


REFERENCES

Neumann:1995:CVE


Nosek:1995:VMG


Weingarten:1995:WHS

REFERENCES


REFERENCES


REFERENCES


Schnase:1995:SPC


Garzotto:1995:HDA


Johnson:1995:CHC


Dieberger:1995:DHS


Bieber:1995:DHS


Davis:1995:EEL


Wiil:1995:HRP


REFERENCES


[938] Pat Langley and Herbert A. Simon. Applications of machine learn-

Bratko:1995:AIL


Church:1995:CAN


Harmon:1995:OOA


Pawlak:1995:RS


Ditto:1995:PAC


Aihara:1995:CEJ


Maes:1995:ALM


Coldwell:1995:AAT


Leveson:1995:IRS


Lynch:1995:GPL


Zurk:1995:VWA


Barlow:1995:EFP


Danowitz:1995:IPC


Denning:1995:EPW


Conger:1995:ECU


Laudon:1995:ECI

REFERENCES


REFERENCES


REFERENCES


REFERENCES


Franz Alt. Franz Alt remembers the early years of computing and the creation of ACM. *Communications of the ACM*, 39(2 (supplement)):1, 5, 6, February 1996. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). ACM MemberNet.


References


Requicha:1996:GRI


Mantyla:1996:CFB


Bernstein:1996:MMD


Candler:1996:OPS


Fayad:1996:TOO


Neumann:1996:WHI

REFERENCES

Bell:1996:VOS

Rada:1996:SSI

Davis:1996:NVI

Ganesan:1996:HUK

Denning:1996:TKE

Walker:1996:CKR

Maher:1996:CBK
REFERENCES


REFERENCES

Myers:1996:IPC


Soloway:1996:LEN


Norman:1996:LCE


Schank:1996:GBS


Scardamalia:1996:SCA


Edelson:1996:CN


Linn:1996:KIH


Scardamalia:1996:SCA

Kafai:1996:SKK


Eden:1996:MLP


Guzdial:1996:CSL


Rosson:1996:SEL


Jackson:1996:LCT


Powell:1996:GC

Moser:1996:TFT


Dolev:1996:TAH


Reiter:1996:DTR


vanRenesse:1996:HFG


Schiper:1996:GCT


Cristian:1996:SAG


Anonymous:1996:IAb


Anonymous:1996:CE


REFERENCES


**Bryson:1996:VRS**


**Bayarri:1996:VRD**


**Fagin:1996:CIL**


**Lucas:1996:RFE**


**Feigenbaum:1996:TAL**


**Reddy:1996:TAL**


**McLeod:1996:CUC**


**Anonymous:1996:APC**
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

Brown:1996:DID


Bushnell:1996:RBF


Lieberman:1996:IG


Kahn:1996:DNV


Selker:1996:NPU


Gentner:1996:AMI


Solowy:1996:IUC

Rubin:1996:CTC

Confrey:1996:FP

Feurzeig:1996:FM

Cappo:1996:MM

Schwartz:1996:MTE

Roschelle:1996:SMM

Horwitz:1996:TSM

Dillenbourg:1996:WIC
[1112] Pierre Dillenbourg and J. A. Self. What if the computer doesn’t know the an-
Anonymous:1996:MLS


Lin:1996:IRC


Sterling:1996:SWF


Meeks:1996:DKS


Isaacs:1996:TTM


Scholtz:1996:TTT


Kuchinsky:1996:TMM


Foley:1996:TTU

REFERENCES


Bennett:1996:BRT


Islam:1996:LDI


Druschel:1996:OSS


Rosenblum:1996:IEF


Rosenberg:1996:OSS


Liedtke:1996:TRM


Cutkosky:1996:MCE

REFERENCES


Vishkin:1996:CPA


Laudon:1996:MP


Baker:1996:CPC


Weinstein:1996:IRB


Press:1996:SNF


Berghel:1996:DP


Luker:1996:VNN


Rada:1996:AFR

REFERENCES


Anonymous:1996:WLP

Resnick:1996:PIA

Iivari:1996:WCT

Basili:1996:HRI

Neumann:1996:IRDa

Glass:1996:PPR

Munro:1996:WSN

Fayyad:1996:DMK

Fayyad:1996:KPE
REFERENCES


<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
</tr>
</thead>
</table>
REFERENCES


REFERENCES


Schneier:1997:IRC


Anonymous:1997:APF


Anonymous:1997:MVP


Anonymous:1997:ACS


Press:1997:PCTa


Anonymous:1997:NAT


Berghel:1997:DVC


Myhrvold:1997:ASC


Crawford:1997:NY

REFERENCES

Bell:1997:HCB

OReilly:1997:HCH

Dyson:1997:HCE

Hillis:1997:HCT

Birnbaum:1997:HCP

Davis:1997:HCG

Tschritzis:1997:HCH

Lanier:1997:HCF


REFERENCES


REFERENCES


[1260] Marko Balabanović and Yoav Shoham. Fab: Content-based, collaborative


Davis:1997:FQP


Cowan:1997:FAT


Exner:1997:FSI


Patel:1997:FFN


Goldstein:1997:FUC


Lingle:1997:FWP


Nachenberg:1997:FR


Yun:1997:FMS


Hsu:1997:VTS


Lieberman:1997:1
REFERENCES

Eisenstadt:1997:MHB

Ungar:1997:DEI

Baecker:1997:SVD

Fry:1997:PAF

Domingue:1997:FDC

Smith:1997:KOC

Gemmell:1997:NTC

Hardaway:1997:DMO
REFERENCES


**Katz:1997:MHD**


**Shekhar:1997:DMG**


**West:1997:TOH**


**Felten:1997:IRW**


**Anonymous:1997:BCN**


**Anonymous:1997:AWH**


**Soloway:1997:LED**


**Anonymous:1997:AECa**


**Anonymous:1997:TNB**
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


[1337] Jesper Simonsen and Finn Kensing. Using ethnography in con-

[Rai:1997:TIB](#)


[Talia:1997:TOP](#)


[Neumann:1997:IRIa](#)


[Meeks:1997:WPL](#)


[Foster:1997:IPW](#)


[Seirawan:1997:VKV](#)


[Simon:1997:VKV](#)

REFERENCES


[1353] Tim Bowman. VR meets physical therapy. Communications of the ACM,
REFERENCES


REFERENCES


REFERENCES


[1378] Starr Roxanne Hiltz and Barry Wellman. Asynchronous learning net-

Faucheux:1997:HVO


Chellappa:1997:EIV


Hardwick:1997:IVE


Mannoni:1997:VM


Zajtchuk:1997:MAV


Cooperstock:1997:RE


Ewusi-Mensah:1997:CIA

REPRESENTATIONS

Rein:1997:CDM


Maisel:1997:ESR


Pearson:1997:MIE


Fayad:1997:TOS


Parnas:1997:IRS


Samuelson:1997:ETS


Lai:1997:OOU


Webber:1997:FMD

REFERENCES

Hsu:1997:AYP

Fayad:1997:OOA

Johnson:1997:FCP

Posnak:1997:AFD

Schmid:1997:SFD

Baumer:1997:FDL

Demeyer:1997:DGT

Brugali:1997:FLS
REFERENCES


[1409] D. Scott Brandt. Constructivism: teaching for understanding of the Inter-
REFERENCES


Ryan:1997:WIM


Neumann:1997:IRIb


Anonymous:1997:UPP


Anonymous:1997:DNN


Fox:1997:NTb


Press:1997:PCTc


Anonymous:1997:AMV

REFERENCES

(11(S)):16–??, November 1997. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).


Ostriker:1997:CEU


Romm:1997:TVP


Hidding:1997:RMW


Gotterbarn:1997:SEC


Hardgrave:1997:FMS


Fayad:1997:TOP


Ladkin:1997:IRR


Fox:1997:NTc

REFERENCES


REFERENCES


Ward:1997:PD


Neumann:1997:IRS


Fox:1998:NT


Rada:1998:SSCa


Munro:1998:WAC


Sabelli:1998:VWN


Burg:1998:CAC


Brown:1998:SPU


MacDougall:1998:AUS

Candiotti:1998:CUA


Weiser:1998:FUC


Biros:1998:CCP


Kiaer:1998:LCI


Watters:1998:DAU


Deden:1998:CSC


LeBlanc:1998:HSC


Grier:1998:CD

REFERENCES


REFERENCES


Behrens:1998:PLA


Kappelman:1998:CCY


Grover:1998:IPC


Johnson:1998:RI


Tayi:1998:SSE


Wang:1998:PPT


Orr:1998:DQS


**Crawford:1998:FPC**


**House:1998:TC**


**Rao:1998:MI**


**Kannan:1998:MIW**


**Palmer:1998:EMW**


**Eder:1998:PC**


**Elofson:1998:CCM**

REFERENCES


REFERENCES


Iris Vessey and Robert Glass. Strong vs. weak approaches to systems development. *Communications of...


Veitch:1998:DDS

Singh:1998:UHI

Morrill:1998:DRP

Veitch:1998:CPG

Gray:1998:MLM

Sztipanovits:1998:SAS

Hardman:1998:SMA

Onoma:1998:RTI
[1545] Akira K. Onoma, Wei-Tek Tsai, Mustafa Poonawala, and Hiroshi Suganuma. Regressing testing in an in-
 REFERENCES


Duchessi:1998:CSB


Robinson:1998:SNL


Fayad:1998:AMM


Keable:1998:LGB


Angehrn:1998:CBD


Grier:1998:PCC


Mercuri:1998:SAI


Robinson:1998:SNL


Fayad:1998:AMM


Angehrn:1998:CBD

Parent:1998:IAD


Gupta:1998:ATT


Joiner:1998:REL


Nishiyama:1998:SAS


Sen:1998:DDT


Fox:1998:NTf


Lukasik:1998:PIE


Carlisle:1998:WNE

Madsen:1998:IMW

Morgan:1998:BIB

Crawford:1998:IA

Singhal:1998:JFI

Tyma:1998:WWU

Bohrer:1998:BPC

Nilsen:1998:ART
[1568] Kelvin Nilsen. Adding real-time capabilities to Java. *Communications


REFERENCES


REFERENCES


[1601] James A. Senn. WISs at Federal Express. *Communications of


REFERENCES


Bakos:1998:ERE


Dewan:1998:ISP


Brynjolfsson:1998:BPP


Dewan:1998:IDP


Kemerer:1998:POO


Slaughter:1998:ECS


Cranor:1998:S


Fielding:1998:WBD


Jarzabek:1998:CUC


Purao:1998:EDO


Hamu:1998:TOA


Denning:1998:IRC


Fox:1998:NTi


Meeks:1998:EFM


Samuelson:1998:LSD

REFERENCES


[1633] Cecilia Claudio. Health care management. *Communications of the
REFERENCES


Peter G. Neumann. Inside risks: Y2K update. Communications of
REFERENCES


REFERENCES


REFERENCES


Grimshaw:1998:M


Moore:1998:DIC


Saltz:1998:PTE


Finley:1998:EOT


Keil:1998:FIS


Kunz:1998:VDT


Kuo:1998:NDC
REFERENCES


REFERENCES


REFERENCES


Whitman:1999:LSC

Berghel:1999:DVV

Hailperin:1999:VCB

Simons:1999:PSW

Kaindl:1999:SMP

Mylopoulos:1999:OOG

Butler:1999:CDS

Jarke:1999:SM


Goldschlag:1999:OR


Gabber:1999:CYA


Reagle:1999:PPP


Benassi:1999:TOP


Clarke:1999:IPC


Gowan:1999:YCD


Glass:1999:RST


Sabherwal:1999:RTO


REFERENCES


REFERENCES


Hayes-Roth:1999:SWI

Glushko:1999:XFA

Smith:1999:SOX

Alderson:1999:TOV

Weinstein:1999:IRB

Yeandel:1999:DIL

Abdulla:1999:OMS

Sahraoui:1999:TRN
[1759] Zohair Sahraoui, Francky Catthoor, Paul Six, and Hugo de Man. Tech-

Pappu:1999:SDF


Wang:1999:CA


Crawford:1999:EPa


Fox:1999:NTd


Crawford:1999:FRB


Glass:1999:PPI


Rada:1999:SSI


Bagert:1999:VTL

REFERENCES


REFERENCES


[1795] Daniel Berdichevsky and Erik Neunschwander. Toward an ethics of
REFERENCES

247


**Madsen:1999:DUP**


**Buur:1999:RUT**


**Vredenburg:1999:IEU**


**Baerentsen:1999:CDP**


**Gardner:1999:SFU**


**Dolan:1999:FAT**


**Muller:1999:OUW**


**Borgholm:1999:CUP**


REFERENCES


 referencing


Panda:1999:DIW


Chin:1999:HCD


Ghosh:1999:ISS


Goan:1999:CBC


Durst:1999:TEC


Stillerman:1999:IDD


Jajodia:1999:TR


Waldo:1999:JAN

citations/journals/cacm/1999-42-7/p76-waldo/.


REFERENCES


Glass:1999:PPB


Soloway:1999:LES


Rosenbloom:1999:TII


Terzopoulos:1999:ALC


Greenberg:1999:FRI


Fitzmaurice:1999:SSI


Badler:1999:ACR


REFERENCES

Crawford:1999:EPf


Fox:1999:NTi


Crawford:1999:FVD


Durst:1999:FAT


Samuelson:1999:LSW


McHenry:1999:IPY


Phoha:1999:VCC

Palmer:1999:DNE


Robertson:1999:EBY


Dhamija:1999:TCM


Gupta:1999:ENM


Ramesh:1999:DMT


Carroll:1999:MIT


Bell:1999:EDM


Dahmann:1999:RAS

258

References


Peppler:1999:IGS


Crane:1999:IDM


Tatham:1999:TOG


Schneier:1999:IRT


Crawford:1999:EPg


Fox:1999:NTj


Crawford:1999:FSPa


Munro:1999:WOT
REFERENCES


Press:1999:PCP


Simons:1999:PHA


Booch:1999:UA


Kobryn:1999:USO


Larsen:1999:DCB


Selic:1999:TCU


Bell:1999:UEA


Conallen:1999:MWA

Cusumano:1999:WNL


Mattsson:1999:FIP


Lau:1999:PII


Lie:1999:MWP


Gotterbarn:1999:SEC


Prechelt:1999:TOC


Schneier:1999:IRR


Crawford:1999:EPh


citations/journals/cacm/1999-42-11/p30-mitchell/.

Valdes-Perez:1999:DTS


Muggleton:1999:SKD


Fu:1999:KDB


DeJong:1999:ECD


Ziarko:1999:DTR


Knight:1999:MOT


Schulze-Kremer:1999:DHG

REFERENCES


REFERENCES


Neumann:1999:IRRc


Crawford:1999:FRU


Crawford:1999:EPi


Godwin:1999:WNW


Fox:1999:NT1


McGinity:1999:SCF

El-Kadi:1999:VSD

Frailey:1999:LSE

Bellman:1999:POB

Adams:1999:UE

Dutton:1999:CSN

Larsen:1999:VTI
Watson:1999:TLG


Igbaria:1999:DFV


Tellioglu:1999:SC


Brereton:1999:FS


Payton:1999:HCH


Cuccias:1999:WRF

Kappelman:1999:WRR


Neumann:1999:IRRd


Blinn:1997:JBC


Knuth:1992:LP


Knuth:1977:FPM