A Complete Bibliography of Publications in *Communications of the ACM*: 1958–1959

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Title word cross-reference

N [Mul59, Coo59, HW59].

-Dimensional [Coo59, HW59, Mul59].

1 [MP59]. **15** [Hum59]. **1957** [Ano59a, Ano59b]. **1959** [Hum59].

2 [Ano60, Coo59, SWT+58b, Tra60a]. **220** [CJM59].

650 [CJM59, Ham59a, Ham59b, KH58].

704 [Gru58]. **709** [Hor59].

Abstracts [NS59b]. **Accelerating** [Weg58]. **ACM** [Tra60a, Ano60]. **Address** [Sch59, Hum59]. **Aegerter** [Tra60a]. **Algebraic** [BCKT59, Gre59a, Kan59, PS58, Voo58, Knu59]. **ALGOL** [BGSW59, DHPS59, Gre59b, IA59]. **Algorithm** [Sel58, Wol58]. **Alpha** [Wer59a, Wer59b]. **Analysis** [Car59a]. **Analyzing** [Wol58]. **Announcement** [Per58]. **Applicability** [Li59]. **Applications** [Fik59, MW58, NS59a, And59, Ano59a, HBR59]. **Approximations** [Wad58]. **Arithmetic** [Car59a, EV59, Ers58, She59b]. **Assimilator** [Gsc59]. **August** [Tra60a]. **Automatic** [AS58, Bem59a, Dij59, KVJ58, LC59, MW58, SC59, She59b, Wil58, Ano59a, Ano59b].

before [Hum59]. **Bendix** [Hum59]. **Bessel** [RR58]. **Binary** [Buc59, EV59, Hal58, Kau58, KH58, Li59, MSR60, Tar59].

Binary-Search [Hal58]. **Bounds** [RR58]. **Burroughs** [CJM59]. **Business** [Fik59, And59, Ano59a, Ano59b, HBR59].

Calculating [Bem58b]. **Calculational** [Sch59]. **Calculator** [KH58]. **Card** [Bem59c]. **center** [Tak59]. **Centers** [CPRS59]. **Central** [Bla59]. **Central-European** [Bla59]. **Changing** [SWT+58b, SWT+58a]. **Characteristic** [Wou59]. **Characters** [Bem59c]. **Chart** [FCC+59, Bri59]. **Charting** [Gan59]. **Check** [Sis58]. **Checklist** [Bem59b]. **Choice** [Buc59, MSR60]. **Code** [Bem59c, Gru58, NS59a]. **Code-Nundrums** [Gru58]. **codes** [NS59b]. **Coding** [AS58, She59b]. **coefficients** [LM59]. **Comm** [Tra60a]. **Command** [Kau58]. **Comment** [Tra60a]. **Comments** [Tra60b]. **Committee** [DHPS59, BGSW59]. **Communication** [Dij59, SWT+58b, SWT+58a]. **Communications** [Ano60]. **Compiler** [Hor59, She59b]. **Compilers** [Car59b]. **Computation** [Bem58a, Sar59, Tra60b, Wil58, CPRS59]. **Computer** [Dij59, EV59, Kau58, Li59, MP59, MW58, Nad59, SC59, Weg59, Hum59, Knu59, Tak59, Van58]. **Computers** [Bla59, Fei59, LC59, Mul58, Sug58, ZA59]. **Computing** [Hol59, SC59, HBR59]. **Conception** [Li59]. **conference** [Hum59]. **Considerations** [CLMS59]. **Constraints** [Wer59a, Wer59b]. **Construction** [Aeg59, AG59, GIC59, Tra60a]. **control** [Ano59a, Ano59b]. **Convergence** [Weg58]. **Conversion** [Tar59]. **Corps** [LC59]. **Corrigendum** [Ano60, Wer59b]. **Counter** [KH58]. **Critical** [SC59]. **Curve** [Fik59, Gib58, How59, Les59].

D [Ano60]. **Data** [Fei59, Gsc59, Ano59a, Ano59b]. **December** [Ano59a, Ano59b]. **Decimal** [Buc59, Kau58, MSR60, Sis58, Tar59]. **Department** [MW58]. **Design** [Li59]. **designed** [Van58]. **Development** [LC59, Ano59a, Ano59b]. **developments** [Hum59]. **Diagrams** [Li59, Voo58]. **Differential** [Pow59]. **Digital** [LC59, MP59, Sug58]. **Dimensional** [Coo59, HW59, Les59, Mul59]. **Discretely** [EV59]. **Distributed** [Coo59, HW59]. **Division** [Gil59, Sar59, Tra60b].

Eastern [Nad59]. **Editor** [McC59, BBB59, BAP+59, CBC58, Car58, CKV58, Gal59, Per59a, Per59b, Sti58, VH58, WC58, Gor58, MSR60]. **Educational** [Hol59]. **Efficient** [Coo59, HW59]. **Elements** [MP59]. **Elimination** [Pow59]. **Empirical** [RR58]. **Engineers** [BCKT59]. **Equations** [Pow59, Wol59, LM59]. **Equivalence** [Ian58b]. **Error** [CR58, Car59a]. **Estimation** [Cho59, CR58]. **Europe** [Nad59]. **European** [Bla59]. **exchange** [Hum59]. **Extended** [Sch59]. **Extensions** [DHPS59]. **Extract** [Kau58]. **Extraction** [Sug58].

Facility [Hal58]. **Feasibility** [CLMS59]. **Feasible** [Bag59]. **Federal** [Ano59a, Ano59b]. **Ferrite** [MP59]. **Fields** [Fei59]. **find** [LM59]. **Fingers** [Buc59, MSR60]. **Fists** [Buc59, MSR60]. **Fitting** [Gib58, How59, Les59]. **Fixed** [Tar59]. **flexibility** [Van58]. **Flexible** [SC59]. **Floating** [Car59a]. **Flow** [FCC+59, Gan59, Voo58, Bri59]. **Flowcharts** [GIC59]. **Formulas** [Weg59]. **Formulation** [Voo58]. **FORTRAN** [She59b]. **Fraction** [Tar59]. **Function** [Kau58, Wol58]. **Functions** [Pow59, RR58].

G [Hum59]. **G-15** [Hum59]. **GAT** [AG59]. **General** [Hol58, MP59]. **Generalized** [Bem59c]. **Generating** [Coo59, HW59, Mul59, RR58]. **Government**

[Ano59a, Ano59b]. **Greenwald** [Ano60].

Handling [Ano60, Gre59c, Wil59]. **High** [And59, She59a]. **High-Speed** [And59, She59a].

IBM [CJM59, Gru58, Ham59a, Ham59b, Hor59, KH58, She59b]. **Identifiers** [Wil59]. **II** [Ano59a, Ham59b]. **III** [Ano59b]. **Impact** [Hum59]. **Implementation** [MW58]. **Improved** [Sis58]. **Indexing** [NS59a]. **input** [Van58]. **Inspection** [Mul58]. **Instructions** [Ano60, Gre59c]. **integrals** [HBR59]. **Intelligence** [Bem59b]. **Internal** [Wil59]. **International** [Gre59a, PS58]. **Interpretation** [IA59]. **Irwin** [Ano60]. **Iterative** [How59, Weg58].

J [Tra60a]. **J.E.I.D.A** [Tak59].

keyboard [Van58, Van58]. **Kutta** [CR58].

Language [BCKT59, Weg59, Wil59, Gre59a, PS58]. **Least** [Les59]. **Least-Squares** [Les59]. **LEM** [MP59]. **LEM-1** [MP59]. **Length** [EV59]. **Letter** [BAP+59, Gor58, McC59]. **Letters** [BBB59, CBC58, Car58, CKV58, Gal59, MSR60, Per59a, Per59b, Sti58, VH58, WC58]. **limited** [Knu59]. **Lincoln** [Van58]. **Linear** [Wer59a, Wer59b, LM59]. **List** [Car59b]. **List-Type** [Car59b]. **Logarithms** [Bem58b]. **Logic** [Li59, MW58]. **Logical** [Wol58]. **Logistic** [How59].

M. [Tra60a]. **Machine** [Bem58a, Gil59, Sch59]. **Machines** [SWT+58b, SWT+58a]. **Macro** [Ano60, Gre59c]. **Magnetic** [MP59]. **management** [Ano59a, Ano59b]. **Manipulation** [Gre59b]. **Mathematical** [Gil59]. **Matrices** [Aeg59, Tra60a]. **Matrix** [Hor59, Ian58a]. **Mechanism** [Sch59]. **Memories** [Car59b]. **Method** [Bem58a, Bem58b, Coo59, HW59, How59, Mul59, Sar59, Tra60b, Wol59, Jee58]. **Methods** [Cor58]. **Micro** [GIC59]. **Micro-Flowcharts** [GIC59]. **Models** [Cho59]. **modification** [Jee58]. **Modifications** [Gre59a]. **Multi** [Les59]. **Multi-Dimensional** [Les59]. **Multiprogramming** [CLMS59].

Need [Sel58]. **Network** [CJM59]. **Newton** [Jee58]. **No** [Ano60, Coo59]. **Nonlinear** [Cho59, Wol59]. **NORC** [And59]. **Note** [Mul59, RR58]. **Notes** [Nad59]. **Nov** [Ano60]. **nuclear** [NS59b]. **Nundrums** [Gru58].

Octal [Li59]. **Operations** [Ers58, Kau58, BAP+59]. **Oracle** [Fik59]. **Oriented** [Weg59]. **Outlining** [Gan59].

Paper [Coo59, Tra60a, Tra60b]. **Parameter** [Cho59]. **Part** [SWT+58a, Ham59a, Ham59b, SWT+58b]. **Plotter** [Fik59]. **Point** [Car59a]. **Points** [Coo59, HW59, Mul59]. **Polynomial** [Les59, LM59]. **Possible** [Gre59a]. **Practical** [Wou59]. **Precision** [Tar59]. **Preliminary** [PS58]. **Previous** [Tra60a]. **Printer** [And59]. **Problem** [SWT+58b, SWT+58a]. **Problems** [Wou59]. **Procedure** [Gil59, She59a]. **Procedures** [Mul58, CR58]. **Processes** [Weg58]. **Processing** [Fei59, Ano59a, Ano59b]. **Processors** [Wil59]. **Produce** [Wol58]. **Program** [Hol59, Ian58b, Ian58a]. **Programmed** [KH58]. **Programming** [Bag59, Bem59b, Ers58, Hol58, LC59, Sch59, SWT+58b, Bem59a, KVJ58, SWT+58a]. **Programs** [Cor58, Ham59a, Ham59b]. **progress** [Ano59a, Ano59b]. **Proposal** [Bag59, Bem59c, Con58]. **Proposed** [Bri59, FCC+59, IA59, SWT+58b, SWT+58a]. **Purpose** [Hol58, MP59].

Queue [CJM59].

radiation [HBR59]. **reactor** [NS59b]. **Real** [Gsc59]. **Recommendations** [BGSW59]. **Recursive** [Car59b, Gib58]. **Redundancy** [Sis58]. **Register** [NS59a]. **Related** [Fei59]. **Remarks** [Coo59, Gre59b, Wou59]. **Repeated** [Sug58]. **Report** [DHPS59, PS58]. **Representation** [Buc59, MSR60]. **Request** [Cor58]. **Research** [LC59, Nad59, BAP+59]. **Role** [Fei59]. **Root** [Bem58a, Wad58]. **Roots** [Sar59, Sug58, Tra60b]. **Rotational** [SC59]. **routine** [LM59]. **RUNCIBLE** [Knu59]. **Runge** [CR58]. **Russian** [ZA59].

SALE [BCKT59]. **Schemes** [Ian58b, Ian58a]. **Scientific** [And59, Ano59a, Fik59, HBR59]. **Search** [Hal58]. **Secant** [Jee58, Wol59]. **September** [Hum59]. **Serial** [EV59]. **Set** [Aeg59, Tra60a]. **Shafts** [SC59]. **SHARE** [BGSW59]. **Shift** [NS59a]. **Shift-Register** [NS59a]. **Signal** [LC59]. **Simple** [AS58, Cho59, BCKT59]. **Simulator** [CJM59]. **Simultaneous** [Wol59, LM59]. **Size** [MP59]. **Small** [MP59]. **Solution** [SWT+58b, Wou59, LM59, SWT+58a]. **Some** [Nad59]. **Sorting** [She59a]. **Soviet** [CPRS59]. **Special** [Pow59]. **Speed** [And59, She59a]. **Speeds** [SC59]. **Sphere** [Coo59, HW59]. **Spheres** [Mul59]. **Square** [Bem58a, Sar59, Tra60b, Wad58]. **Square-Root** [Bem58a, Wad58]. **Squares** [Les59]. **Standard** [FCC+59, Bri59]. **Standards** [Bri59]. **Statements** [Wol58]. **Statistical** [Ham59a, Ham59b]. **STRETCH** [CLMS59]. **Sub** [DHPS59]. **Sub-Committee** [DHPS59]. **Subroutine** [Bem58b]. **Subscripting** [Car59b]. **Substitute** [Gan59]. **Subtractions** [Sug58]. **Surface** [Coo59, HW59]. **Survey** [Ano59b, Ano59a]. **Symbol** [Gre59b]. **Symbols** [FCC+59, Wil59, Bri59]. **System** [Bag59, Wer59a, Wer59b, She59b]. **Systems** [AS58, Bem59b, Hol58, Ano59a, Ano59b, Bem59a, KVJ58].

Table [Wol58]. **Tables** [Hal58, Wil58]. **Tape** [Hor59]. **Technique** [Ano60, Gib58, Gre59c, SC59]. **Test** [Aeg59, Tra60a]. **Their** [Li59]. **Time** [Gsc59]. **Transformation** [Ian58b, Wer59a, Wer59b]. **translation** [Knu59]. **Translator** [Kan59, She59b]. **Translators** [AG59]. **trend** [Ano59a, Ano59b]. **Truth** [Kau58, Wol58]. **Truth-Function** [Kau58]. **Two** [Wad58]. **Type** [Car59b, KH58]. **typewriter** [Van58].

U.S. [ZA59]. **UNCOL** [Con58]. **Uniformly** [Coo59, HW59, Mul59]. **Union** [CPRS59]. **University** [Fei59]. **Unusual** [MW58]. **Use** [Mul58, Ano59a, Ano59b]. **users** [Hum59]. **Using** [MP59, Sar59, Tra60b].

Value [Wou59]. **Variable** [EV59, Hal58]. **Variable-Width** [Hal58]. **Vector** [Wer59a, Wer59b]. **Visit** [CPRS59, ZA59].

Width [Hal58]. **Without** [Sar59, Tra60b]. **Word** [EV59].

References

Aegerter:1959:CST

[Aeg59] M. J. Aegerter. Construction of a set of test matrices. *Communications of the ACM*, 2 (8):10–12, August 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Arden:1959:GCT

[AG59] Bruce W. Arden and R. Graham. On GAT and the construction of translators. *Communi-*

cations of the ACM, 2(7):24–26, July 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anderson:1959:NHS

[And59] William H. Anderson. Scientific and business applications: NORC high-speed printer. *Communications of the ACM*, 2(6): 25–26, June 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anonymous:1959:SBA

[Ano59a] Anonymous. Scientific and business applications: survey of progress and trend of development and use of automatic data processing in business and management control systems of the Federal Government, as of December 1957 — II. *Communications of the ACM*, 2(5):17–20, May 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anonymous:1959:SPT

[Ano59b] Anonymous. Survey of progress and trend of development and use of automatic data processing in business and management control systems of the Federal Government, as of December 1957 — III. *Communications of the ACM*, 2 (9):34–43, September 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Anonymous:1960:CTH

[Ano60] Anonymous. Corrigendum: "A Technique for Handling Macro Instructions", by Irwin D. Greenwald, *Communications ACM* **2**, No. 11 (Nov. 1959). *Communications of the ACM*, 3(2):75, February 1960. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See [Gre59c].

Adams:1958:SAC

[AS58] Eldridge S. Adams, Jr. and Stewart I. Schlesinger. Simple automatic coding systems. *Communications of the ACM*, 1(7):5–9, July 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bagley:1959:PFP

[Bag59] Philip R. Bagley. Proposal for a feasible programming system. *Communications of the ACM*, 2 (8):7–10, August 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Brothers:1959:LEO

[BAP+59] LeRoy A. Brothers, Paul Armer, Millard H. Perstein, Dan C. Wilkins, P. A. Zaphyr, M. J. R. Healy, H. M. Lieberstein, and Bruce Gilchrist. Letter to the editor of operations research. *Communications of the ACM*, 2 (1):4–5, January 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bemer:1959:LE

[BBB59] R. W. Bemer, Walter F. Bauer, and Philip R. Bagley. Letters to the editor. *Communications of the ACM*, 2(1):2–3, January 1959. CODEN CACMA2.

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

Brittenham:1959:SSA

[BCKT59] W. R. Brittenham, K. Clark, G. Kuss, and H. Thompson. SALE, a Simple Algebraic Language for Engineers. *Communications of the ACM*, 2(10): 22–24, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bemer:1958:MMS

[Bem58a] Robert W. Bemer. A machine method for square-root computation. *Communications of the ACM*, 1(1):6–7, January 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bemer:1958:SMC

[Bem58b] Robert W. Bemer. A subroutine method for calculating logarithms. *Communications of the ACM*, 1(5):5–8, May 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bemer:1959:APS

[Bem59a] Robert W. Bemer. Automatic programming systems. *Communications of the ACM*, 2(5):16, May 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bemer:1959:CIP

[Bem59b] Robert W. Bemer. A checklist of intelligence for programming systems. *Communications of the ACM*, 2(3):8–13, March 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bemer:1959:PGC

[Bem59c] Robert W. Bemer. A proposal for a generalized card code for 256 characters. *Communications of the ACM*, 2(9):19–23, September 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bratman:1959:RSA

[BGSW59] Harvy Bratman, Julien Green, John Stockman, and Albert R. Watson. Recommendations of the SHARE ALGOL Committee. *Communications of the ACM*, 2 (10):25–26, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Blachman:1959:CEC

[Bla59] Nelson M. Blachman. Central-European computers. *Communications of the ACM*, 2(9): 14–18, September 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Bright:1959:SPS

[Bri59] H. S. Bright. Standards: Proposed standard flow chart symbols. *Communications of the ACM*, 2(10):17, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Buchholz:1959:FFC

[Buc59] Wilfried Buchholz. Fingers or fists? (the choice of decimal

or binary representation). *Communications of the ACM*, 2(12): 3–11, December 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See letters [MSR60].

Carr:1958:LE

[Car58] John W. Carr, III. Letters to the editor. *Communications of the ACM*, 1(11):3, November 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Carr:1959:EAF

[Car59a] John W. Carr, III. Error analysis in floating point arithmetic. *Communications of the ACM*, 2(5):10–15, May 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Carr:1959:RSC

[Car59b] John W. Carr III. Recursive subscripting compilers and list-type memories. *Communications of the ACM*, 2(2):4–6, February 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Carlson:1958:LE

[CBC58] Walter M. Carlson, Roger L. Boyell, and B. Conway. Letters to the editor. *Communications of the ACM*, 1(8):2, August 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Chow:1959:PES

[Cho59] Wen M. Chow. Parameter estimation for simple nonlinear models. *Communications of the ACM*, 2(7):28–29, July 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Conway:1959:QNS

[CJM59] Richard W. Conway, B. M. Johnson, and William L. Maxwell. A queue network simulator for the IBM 650 and Burroughs 220. *Communications of the ACM*, 2 (12):20–23, December 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Correll:1958:LE

[CKV58] Quentin Correll, Otto Matty Khodr, and Alexander Vanderburgh, Jr. Letters to the editor. *Communications of the ACM*, 1(7):2–3, July 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Codd:1959:MSF

[CLMS59] E. F. Codd, E. S. Lowry, E. McDonough, and Casper A. Scalzi. Multiprogramming STRETCH: Feasibility considerations. *Communications of the ACM*, 2(11): 13–17, November 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Conway:1958:PU

[Con58] Melvin E. Conway. Proposal for an UNCOL. *Communications of the ACM*, 1(10):5–8, October 1958. CODEN CACMA2.

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

Cook:1959:RRP

[Coo59] J. M. Cook. Remarks on a recent paper: "An Efficient Method for Generating Uniformly Distributed Points on the Surface of an n-Dimensional Sphere" (**2**, No. 4 (1959), 17). *Communications of the ACM*, 2(10):26, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See [HW59].

Corley:1958:RMP

[Cor58] Henry P. T. Corley. Request for methods or programs. *Communications of the ACM*, 1(4):9–11, April 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Carr:1959:VCC

[CPRS59] John W. Carr III, Alan J. Perlis, James E. Robertson, and Norman R. Scott. A visit to Computation Centers in the Soviet Union. *Communications of the ACM*, 2(6):8–20, June 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Call:1958:EER

[CR58] Dickson H. Call and Roy F. Reeves. Error estimation in Runge–Kutta procedures. *Communications of the ACM*, 1(9): 7–8, September 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dijkstra:1959:ASC

[DHPS59] Edsger W. Dijkstra, W. Heise, Alan J. Perlis, and K. Samelson. ALGOL sub-committee report — extensions. *Communications of the ACM*, 2(9):24–??, ???? 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Dijkstra:1959:CACb

[Dij59] Edsger W. Dijkstra. Communication with an automatic computer. *Communications of the ACM*, 2 (9):24, September 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ershov:1958:PAO

[Ers58] Andrei P. Ershov. On programming of arithmetic operations. *Communications of the ACM*, 1(8):3–6, August 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ercoli:1959:BAD

[EV59] Paolo Ercoli and Roberto Vacca. Binary arithmetic for discretely variable word length in a serial computer. *Communications of the ACM*, 2(4):13–15, April 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fritz:1959:PSF

[FCC+59] W. Barkley Fritz, Marion Campbell, Webb T. Comfort, Frank Engel, Millard H. Perstein, and Joseph H. Wegstein. Proposed standard flow chart symbols.

Communications of the ACM, 2 (10):17–18, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fein:1959:RUC

[Fei59] Louis Fein. The role of the University in computers, data processing and related fields. *Communications of the ACM*, 2(9): 7–14, September 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fike:1959:SBA

[Fik59] C. T. Fike. Scientific and business applications: ORACLE curve plotter. *Communications of the ACM*, 2(10):38–39, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Galler:1959:LE

[Gal59] Bernard A. Galler. Letters to the editor. *Communications of the ACM*, 2(4):6–9, April 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gant:1959:FOS

[Gan59] W. T. Gant. Flow outlining — A substitute for flow charting. *Communications of the ACM*, 2 (11):17, November 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Giblin:1958:RCF

[Gib58] John Giblin. Recursive curve fitting technique. *Communications of the ACM*, 1(8):10–11, August 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gorn:1959:CMF

[GIC59] Saul Gorn, P. Z. Ingerman, and J. B. Crozier. On the construction of micro-flowcharts. *Communications of the ACM*, 2(10): 27–31, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gilman:1959:MPM

[Gil59] R. E. Gilman. A mathematical procedure for machine division. *Communications of the ACM*, 2 (4):10–12, April 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gorn:1958:LE

[Gor58] Saul Gorn. Letter to the Editor. *Communications of the ACM*, 1(1):1, January 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Green:1959:PMI

[Gre59a] Julien Green. Possible modifications to the International Algebraic Language. *Communications of the ACM*, 2(2):6–8, February 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Green:1959:RAS

[Gre59b] Julien Green. Remarks on ALGOL and symbol manipulation. *Communications of the ACM*, 2 (9):25–27, September 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Greenwald:1959:THM

[Gre59c] Irwin D. Greenwald. A technique for handling macro instructions. *Communications of the ACM*, 2 (11):21–22, November 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See corrigendum [Ano60].

Grumette:1958:ICN

[Gru58] Murray Grumette. IBM 704 code-nundrums. *Communications of the ACM*, 1(3):3–4, March 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Gschwind:1959:RTD

[Gsc59] Hans W. Gschwind. A real time data assimilator. *Communications of the ACM*, 2(7):33–36, July 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Halpern:1958:VWT

[Hal58] Mark Halpern. Variable-width tables with binary-search facility. *Communications of the ACM*, 1 (2):1–3, February 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hamblen:1959:SPIa

[Ham59a] John W. Hamblen. Statistical programs for the IBM 650 — Part I. *Communications of the ACM*, 2(8):13–18, August 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hamblen:1959:SPIb

[Ham59b] John W. Hamblen. Statistical programs for the IBM 650 — Part II. *Communications of the ACM*, 2(10):32–37, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hansen:1959:SBA

[HBR59] R. C. Hansen, L. L. Bailin, and R. W. Rutishauser. Scientific and business applications: on computing radiation integrals. *Communications of the ACM*, 2(2): 28–31, February 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Holt:1958:GPP

[Hol58] Anatol W. Holt. General purpose programming systems. *Communications of the ACM*, 1(5):7–9, May 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hollingsworth:1959:EPC

[Hol59] Jack Hollingsworth. An educational program in computing. *Communications of the ACM*, 2(8):6, August 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hornick:1959:ITM

[Hor59] Scot D. Hornick. IBM 709 tape matrix compiler. *Communications of the ACM*, 2(9): 31–32, September 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Howell:1959:IMF

[How59] John R. Howell. An iterative method for fitting the logistic curve. *Communications of the ACM*, 2(3):5–6, March 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Humphrey:1959:ICD

[Hum59] Stanley M. Humphrey. Impact of computer developments: an address before the Bendix G-15 users exchange conference, September 17, 1959. *Communications of the ACM*, 2(12): 16–19, December 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Hicks:1959:EMG

[HW59] J. S. Hicks and R. F. Wheeling. An efficient method for generating uniformly distributed points on the surface of an n-dimensional sphere. *Communications of the ACM*, 2(4):17–19, April 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See remarks [Coo59].

Irons:1959:PIA

[IA59] Edgar T. Irons and F. S. Acton. A proposed interpretation in ALGOL. *Communications of the ACM*, 2(12):14–15, December 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Ianov:1958:MPS

[Ian58a] Iu. I. Ianov. On matrix program schemes. *Communications of the ACM*, 1(12):3–6, December 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). Translated by Morris D. Friedman of the original Russian article published in Doklady, AN USSR, **113**(2), 282–286 (1957).

Ianov:1958:ETP

[Ian58b] Iu. I. Ianov. On the equivalence and transformation of program schemes. *Communications of the ACM*, 1(10):8–12, October 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). Translated by Morris D. Friedman of the original Russian article published in Doklady, AN USSR, **113**(1), 39–42 (1957).

Jeeves:1958:SMN

[Jee58] T. A. Jeeves. Secant modification of Newton's method. *Communications of the ACM*, 1 (8):9–10, August 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kanner:1959:AT

[Kan59] H. Kanner. An algebraic translator. *Communications of the ACM*, 2(10):19–22, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kautz:1958:BTF

[Kau58] William H. Kautz. Binary and truth-function operations on a decimal computer with an extract command. *Communications of the ACM*, 1(5):12–13,

May 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See corrections [KVJ58].

Kenny:1958:PBC

[KH58] B. C. Kenny and J. A. Hunter. A programmed binary counter for the IBM Type 650 calculator. *Communications of the ACM*, 1 (1):11–12, January 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Knuth:1959:RAT

[Knu59] Donald E. Knuth. RUNCIBLE — algebraic translation on a limited computer. *Communications of the ACM*, 2(11):18–21, November 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Kautz:1958:APS

[KVJ58] William H. Kautz, Edward A. Voorhees, and T. A. Jeeves. Automatic programming systems. *Communications of the ACM*, 1(8):6–8, August 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). Contains corrections to [Kau58].

Luebbert:1959:SCR

[LC59] William F. Luebbert and Percy W. Collom, Jr. Signal Corps research and development on automatic programming of digital computers. *Communications of the ACM*, 2(2):22–27, February 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Lesh:1959:MDL

[Les59] Fred H. Lesh. Multi-dimensional least-squares polynomial curve fitting. *Communications of the ACM*, 2(9):29–30, September 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Li:1959:ODB

[Li59] Shu-T'ien Li. Octal diagrams of binary conception and their applicability to computer design logic. *Communications of the ACM*, 2(9):28–29, September 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Larson:1959:RFS

[LM59] E. H. Larson and D. P. Marshall. A routine to find the solution of simultaneous linear equations with polynomial coefficients. *Communications of the ACM*, 2(4):16–17, April 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

McCarthy:1959:LE

[McC59] John McCarthy. Letter to the editor. *Communications of the ACM*, 2(8):2–3, August 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Machmudov:1959:LSS

[MP59] U. A. Machmudov and A. S. Popov. LEM-1, small size general purpose digital computer using magnetic (ferrite) elements.

Communications of the ACM, 2 (10):3–9, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Maehly:1960:LEF

[MSR60] Hans J. Maehly, J. Svigals, and J. B. Reid. Letters to the Editor: Fingers or fists? (the choice of decimal or binary representation). *Communications of the ACM*, 3(3):A11–A13, March 1960. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See [Buc59].

Muller:1958:UCI

[Mul58] Mervin E. Muller. The use of computers in inspection procedures. *Communications of the ACM*, 1(11):7–13, November 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Muller:1959:NMG

[Mul59] Mervin E. Muller. A note on a method for generating points uniformly on N-dimensional spheres. *Communications of the ACM*, 2(4):19–20, April 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Morris:1958:UAD

[MW58] E. F. Morris and T. E. Wohr. Unusual applications department — automatic implementation of computer logic. *Communications of the ACM*, 1(5):14–20, May 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Nadler:1959:SNC

[Nad59] Morton Nadler. Some notes on computer research in Eastern Europe. *Communications of the ACM*, 2(12):1–2, December 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Nadler:1959:SRC

[NS59a] Mortin Nadler and A. Sengupta. Shift-register code for indexing applications. *Communications of the ACM*, 2(10):40–43, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Nather:1959:ANR

[NS59b] Virginia Nather and Ward C. Sangren. Abstracts — nuclear reactor codes. *Communications of the ACM*, 2(1):6–32, January 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Perlis:1958:A

[Per58] Alan J. Perlis. Announcement. *Communications of the ACM*, 1(1):1, January 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Perlis:1959:LEa

[Per59a] Alan J. Perlis. Letters to the editor. *Communications of the ACM*, 2(5):3–9, May 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Perlis:1959:LEb

[Per59b] Alan J. Perlis. Letters to the editor. *Communications of the ACM*, 2(8):2–5, August 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Powers:1959:ESF

[Pow59] John E. Powers. Elimination of special functions from differential equations. *Communications of the ACM*, 2(3):3–4, March 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Perlis:1958:PRI

[PS58] Alan J. Perlis and K. Samelson. Preliminary report — International Algebraic Language. *Communications of the ACM*, 1 (12):8–22, December 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Randels:1958:NEB

[RR58] James B. Randels and Roy F. Reeves. Note on empirical bounds for generating Bessel functions. *Communications of the ACM*, 1(5):3–5, May 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sarafyan:1959:NMC

[Sar59] Diran Sarafyan. A new method of computation of square roots without using division. *Communications of the ACM*, 2(11): 23–24, November 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See comments [Tra60b].

Schwartz:1959:TCC

[SC59] B. L. Schwartz and H. A. Cress. A technique for computing critical rotational speeds of flexible shafts on an automatic computer. *Communications of the ACM*, 2(6):27–31, June 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Schecher:1959:PME

[Sch59] Heinz Schecher. Programming for a machine with an extended address calculational mechanism. *Communications of the ACM*, 2(6):32–38, June 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Selden:1958:NA

[Sel58] W. Selden. Need for an algorithm. *Communications of the ACM*, 1(4):7–9, April 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Shell:1959:HSS

[She59a] Donald L. Shell. A high-speed sorting procedure. *Communications of the ACM*, 2(7):30–32, July 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sheridan:1959:ATC

[She59b] Peter B. Sheridan. The arithmetic translator compiler of the IBM FORTRAN Automatic

Coding System. *Communications of the ACM*, 2(2):9–21, February 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL `http://community.computerhistory.org/scc/projects/FORTRAN/paper/p9-sheridan.pdf`.

Sisson:1958:IDR

[Sis58] Roger L. Sisson. An improved decimal redundancy check. *Communications of the ACM*, 1(5): 10–12, May 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Stillson:1958:LE

[Sti58] J. Gordon Stillson. Letters to the editor. *Communications of the ACM*, 1(9):2, September 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Sugai:1958:ERR

[Sug58] Iwao Sugai. Extraction of roots by repeated subtractions for digital computers. *Communications of the ACM*, 1(12):6–8, December 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Strong:1958:PPCa

[SWT+58a] J. Strong, J. Wegstein, A. Tritter, J. Olsztyn, O. Mock, and T. Steel. The problem of programming communication with changing machines: a proposed solution (part 1). *Communications of the ACM*, 1(8):12–18, August 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Strong:1958:PPCb

[SWT+58b] J. Strong, J. H. Wegstein, A. Tritter, J. Olsztyn, Owen R. Mock, and T. Steel. The problem of programming communication with changing machines A proposed solution (Part 2). *Communications of the ACM*, 1(9):9–16, ???? 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Takasaki:1959:JDC

[Tak59] Isao Takasaki. J.E.I.D.A. and its computer center. *Communications of the ACM*, 2(10): 10–16, October 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Taranto:1959:BCF

[Tar59] Donald Taranto. Binary conversion, with fixed decimal precision, of a decimal fraction. *Communications of the ACM*, 2(7):27, July 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Traub:1960:CPP

[Tra60a] J. F. Traub. Comment on a previous paper [M. J. Aegerter, *Construction of a Set of Test Matrices*, Comm. ACM **2**(8), 10–12 August (1990)]. *Communications of the ACM*, 3(6):352, June 1960. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See [Aeg59].

Traub:1960:CNM

[Tra60b] J. F. Traub. Comments on a recent paper ["A New Method of Computation of Square Roots Without Using Division"]. *Communications of the ACM*, 3(2): 86, February 1960. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See [Sar59].

Vanderburgh:1958:LKT

[Van58] A. Vanderburgh. The Lincoln Keyboard: a typewriter keyboard designed for computer input flexibility. *Communications of the ACM*, 1(7):4, July 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Verzuh:1958:LE

[VH58] F. M. Verzuh and Charles C. Holt. Letters to the editor. *Communications of the ACM*, 1(6):3, June 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Voorhees:1958:AFF

[Voo58] Edward A. Voorhees. Algebraic formulation of flow diagrams. *Communications of the ACM*, 1(6):4–8, June 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wadey:1958:TSR

[Wad58] W. G. Wadey. Two square-root approximations. *Communications of the ACM*, 1(11): 13–14, November 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Weiss:1958:LE

[WC58] E. A. Weiss and Henry P. T. Corley. Letters to the editor. *Communications of the ACM*, 1(4):5, April 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wegstein:1958:ACI

[Weg58] J. H. Wegstein. Accelerating convergence of iterative processes. *Communications of the ACM*, 1(6):9–13, June 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wegstein:1959:FCO

[Weg59] J. H. Wegstein. From formulas to computer oriented language. *Communications of the ACM*, 2(3):6–8, March 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wersan:1959:AVT

[Wer59a] Stephen J. Wersan. The alpha vector transformation of a system of linear constraints. *Communications of the ACM*, 2(9): 33–34, September 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See corrigendum [Wer59b].

Wersan:1959:CAV

[Wer59b] Stephen J. Wersan. Corrigendum: "The Alpha Vector Transformation of a System of Linear Constraints". *Communications*

of the ACM, 2(10):39, October 1959. See [Wer59a].

Wilf:1958:TAC

[Wil58] Herbert S. Wilf. Tables for automatic computation. *Communications of the ACM*, 1(1):8–11, January 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Williams:1959:HII

[Wil59] Francis A. Williams. Handling identifiers as internal symbols in language processors. *Communications of the ACM*, 2(6):21–24, June 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wolpe:1958:AAL

[Wol58] Harold Wolpe. Algorithm for analyzing logical statements to produce a truth function table. *Communications of the ACM*, 1 (3):4–13, March 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wolfe:1959:SMS

[Wol59] Philip Wolfe. The secant method for simultaneous nonlinear equations. *Communications of the ACM*, 2(12):12–13, December 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wouk:1959:RPS

[Wou59] A. Wouk. Remarks on the practical solution of characteristic value problems. *Communications of the ACM*, 2(6):38–39, June 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Zaitzeff:1959:RVU

[ZA59] E. M. Zaitzeff and Morton M. Astrahan. Russian visit to U.S. computers. *Communications of the ACM*, 2(11):4–11, November 1959. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).