

# A Complete Bibliography of Publications in *Annals of the History of Computing*

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

FAX: +1 801 581 4148

E-mail: [beebe@math.utah.edu](mailto:beebe@math.utah.edu), [beebe@acm.org](mailto:beebe@acm.org),  
[beebe@computer.org](mailto:beebe@computer.org) (Internet)

WWW URL: <http://www.math.utah.edu/~beebe/>

30 January 2021

Version 2.61

## Title word cross-reference

**1961** [HEA<sup>+</sup>83]. **1967** [Tro87]. **1978** [Ano82d]. **1980** [LP81, RS80a]. **1981** [RS80a, Wal81]. **1982** [ABE<sup>+</sup>83, Lee84b, TWA<sup>+</sup>87]. **1983** [Bur81]. **1984** [CK82b, Kin87]. **1985** [CMF<sup>+</sup>90]. **1987** [Blu87, MN88a]. **1987/88** [Ano87b]. **1988** [GIS90]. **1988/89** [Ano88c]. **1989** [WCB90]. **1990** [BDA91, CW91, TLR<sup>+</sup>91]. **1994** [MM97]. **19th** [Gol77].

**#4396** [LH86]. **#4571** [Hur83c]. **#4666** [Hur83c].

**-2001** [TPWW92].

**1** [BRG<sup>+</sup>87, Nap00, O'N91, Rob87, Wad00]. **10/18/51** [McC83d]. **100th** [Kis91]. **130th** [Kis91]. **15** [Hus84]. **155** [Ano80c]. **162** [Ano83l]. **16th** [Gol77]. **1835** [Van83]. **1940** [Ano82d, CWM<sup>+</sup>91, RB85]. **1940s** [PAD82]. **1944** [ML87]. **1945** [TDCKW84]. **1947** [Ano48, Har85a, RWSW85, Ste85b]. **1950s** [Bac80]. **1952** [Ano83-31]. **1955** [Ano86c]. **1959** [Ano85f, Ano85i, Cli85]. **1960** [Ano85f, Aue86a]. **1960s** [TPG<sup>+</sup>89, Ver90].

**2** [Lec90, Wei85a]. **2-B** [BSEW83, Wei85a]. **20th** [BHB<sup>+</sup>89, CWM<sup>+</sup>91, CW91, Cha91b, Nor90, Tro87]. **218** [BRS<sup>+</sup>89]. **21st** [MN88b]. **232** [Ano81e]. **25** [dBDvdR71]. **256** [Ano80b]. **25th** [AW82, Gal86c, Lee85, ML87, TDCKW84]. **279** [Ano80b]. **293** [Ano81e].

- 30** [Tro87]. **30th** [O’N91]. **360** [Eva86, Pug84].
- 40th** [MHW87]. **41** [Ano80c].
- 500** [Sta90]. **5000** [BBC<sup>+</sup>87, Bem87, BRG<sup>+</sup>87, BGR88, Gal87a, LK87, Oli87, Ros87].
- 60th** [TLR<sup>+</sup>91]. **650** [Gal86d, Gla86, Hae86, HK86, Her86, Hug86, Hur86a, Knu86, PV86, SN86, Tri86]. **6600** [Tho80b].
- 7** [AJ83]. **701** [Ano83-36, Hur83a, Joh83, LS83, Roc83b, Ryc83, Smi83, Swe83, Voo83b]. **701A** [Ano83y, Amd83]. **7080** [Bas83]. **7880s** [WSC<sup>+</sup>88]. **7950s** [WSC<sup>+</sup>88].
- ’82** [AW82, Wil82].
- 9** [BFB82]. **93** [Ano80c, Ano88b].
- A.** [BSS84, KT80a, O’N91, RWSW85, SS80, TDCKW84, VBCC83, WTE<sup>+</sup>85]. **A.M.** [TWCD86]. **Abacus** [Ano83-34, Wei89a]. **ABC** [Ste84]. **Above** [WTE<sup>+</sup>85, Ber84, Ber87]. **Account** [BCKS<sup>+</sup>83, Fra81]. **ACE** [Ano83l, AWL<sup>+</sup>88, CK81, Hus84, TA81, TWCD86, Wil80b]. **achievements** [Asi72, Asi82]. **ACM** [AWB<sup>+</sup>88, Bur81, MN88a, Mil86, O’N92, Wex93, Ano80e, Blu87, BHB<sup>+</sup>89, CK82b, O’N91]. **ACM’80** [WR81]. **Active** [TPG<sup>+</sup>89]. **Activities** [Amo90, Bur81, McC83a, Noh84, Sam79, Sam80]. **Activity** [Ano80c, Ano83l, CK80a, CK80b, CK81]. **Ada** [ASS87, AFB<sup>+</sup>89, HG79, ZT86, Bau86, Moo77, Ste85a, WMS<sup>+</sup>89]. **Addendum** [AMTC80]. **Adelle** [OLCJ91]. **Admiral** [O’N92]. **Adriaan** [WZ89]. **Advanced** [Asp00, Big80]. **Advances** [Sny80]. **Advent** [Ata84, Ran82a]. **Adventure** [Ray89].
- Adventures** [BFB82]. **Advertisement** [Ran83]. **Advertising** [AdB86]. **advisability** [Mer82]. **Aeronautical** [CCR<sup>+</sup>91, Lub91, Vin90, Vin93]. **AFCET** [Hof90]. **AFIPS** [CK82b, Gal86c, Ano83-33, Ano83-34, Ano86b, AAA<sup>+</sup>86, Car86b, Rec86, Sam79, Sam80, War86, WHG<sup>+</sup>86, Wei91c, WSC<sup>+</sup>88]. **African** [CFK<sup>+</sup>91, FG90]. **After** [MM88]. **Afterword** [Bac84a, Ano82d]. **Against** [TMRL89]. **Age** [Ele81, SWT<sup>+</sup>81, WSC<sup>+</sup>88, Asi64, Ber84, Ber87, BL82, Cer89, Coh00, Jen90, Mor84, PS91, BSS84, CKSW83, CCKSS90, CW91, WTE<sup>+</sup>85]. **aid** [Zus82a]. **Aids** [Ano86p, Cra92]. **Aiken** [BHW<sup>+</sup>90, AA85b, Coh88, Coh00, Ran82b, WH84]. **Air** [EZB83, WSC<sup>+</sup>88]. **Aircraft** [Ano83i, RMV82, Ama83, Ano83d, Por83]. **Aitken** [TTG82]. **Al** [Zem79, CFK<sup>+</sup>91, LTC<sup>+</sup>81, LB81, SR82, Tro82b, CKSW83, SZ84, CH90]. **al-Khāwarizmi** [CH90]. **Al-Khorezmi** [Zem79, CKSW83, SZ84]. **al-Khwarizmi** [CFK<sup>+</sup>91]. **Alamos** [Voo83a, Ano83n, BFB82, Mac91, MN82, Swe83, TTB<sup>+</sup>88, Voo83b]. **Alan** [CK84, TDCKW84, Asp80, Hod83a, Hod83b, Hod85, Hod00, Lea05, MJ84, Pet08, THWV88, WTZ90]. **Albers** [GMT85]. **Albert** [Buc83]. **Alexander** [AW89, TTG82]. **Alexanderson** [GMT85]. **Alfred** [Add84, RB85]. **Algebraic** [Ata82]. **Algorithmic** [dBvV81a, GG92, Tro82a, Wel80, Zem83, dBvV81b]. **Algorithms** [Tra84, Zem79]. **Alice** [Ano82d]. **Allies** [AWL<sup>+</sup>88, WTE<sup>+</sup>85, Koz84a, Koz84b]. **Allocation** [Bau90, Gol84, Sak84]. **Alto** [ACM00, AWB<sup>+</sup>88]. **Alwin** [dB86]. **America** [RWSW85, ARE<sup>+</sup>87, Bac80, McM84, PW82, PW84b, PWA92, Rei81]. **American** [All91, CMF<sup>+</sup>90, Str83, Kid90b, Yat89]. **AN/FSQ** [AJ83]. **AN/FSQ-7** [AJ83]. **Analog** [BS84, Tom85a, Lan00]. **Analysis**

[Ano81e, AG89, Gol77, Sma46, Tra66, RS80a, SWT+81]. **Analytical** [CCR+91, Lub91, Ran82c, Vin90, Vin93, Bab82b, Bro82, Lud82, Mer82, Ran82k]. **ancient** [Asi72, Asi82]. **Andahl** [Ano83-34]. **Andrew** [CK84]. **Andrews** [LS82]. **Andri** [WG90]. **Anecdotes** [AA85b, Ano84d, Aus81, BH81, BFB82, Buc81, Car86a, Dou79, FL86, GM85, Gre91, Hus85, Kes80, Nag80, SWT+81, Sha89, Ste84, SHH81, TTG82, Tho80a, THWV88, TD88, TBS88, TTB+88, TMRL89, TLR89, TPG+89, TBGE89, TBB90, TKE90, TBLJ90, TD90, TLR+91, TG91, TWPP91, TPWW92, Tro83a, TB84, Tro84, TW87, TWA+87, Zem83, vdPWB82]. **Angeles** [Ano83-32, Mil86]. **Annals** [Ano86i, Ano79b, Ano80a, Ano81a, Ano81d, Ano81c, Ano81h, Ano83-29, Ano84f, Ano84g, Ano85g, Ano86j, Asp88, CK82b, EM88]. **Anniversary** [AW82, BHB+89, Cer80, CFK+91, Fin84, Kis91, ML87, O'N91, SZ84, TDCKW84, Tro87, WD85, Gal86c, Lee85, MHW87]. **Annotated** [Asp87, Lee84a, Ran79, Pet08]. **Announced** [Buc83, Ano83-33]. **Announcement** [Ano83e, Ano83f, Ano83o, Ano86a]. **Announcing** [Bem87]. **Answer** [CS85, Kes86, TS85]. **Answers** [Ano83g, Ano83h, Ano83-37, Ano83-38, Ano84m, Ano84n, Ano84o, Ano84p, Ano85n, Ano85o, Ano85p, Ano85q, Ano86r, Ano86s, Ano86t, Ano86u, Ano88f, Ano91a, Ano91b, CS85, Lee91e, Sam87a, Sam87b, Sam87c, Sam88a, Sam88b, Sam88c, Sam88d, Sam89a, Sam89b, Sam89c, Sam89d, Sam90a, Sam90b, Sam90c, Sam90d, Sam91c]. **Anti** [RMV82]. **Anti-Aircraft** [RMV82]. **Antiaircraft** [BS84]. **Anticipation** [BHW+90]. **Antonin** [Obl80b]. **APL** [FI78, Fra84, Fra85, SS80]. **Appendix** [Wil79]. **Apple** [CW91, Ros89]. **Application** [Ano83p, TWA+87, Asp00]. **Applications** [Ano86p, RGB83, Tor82b].

**Applied** [Cur89a, Cur89c, BRS+89, McC83a]. **appointed** [Mer82]. **Appoints** [Ano83-33]. **appraisal** [Ste81]. **Appreciation** [Knu86]. **Approach** [Bar87]. **Approaches** [Sam91d, Tra84]. **April** [Kin87, Wex93, Ano83z]. **archaeological** [Lay89]. **Architect** [Roc83b]. **Architecture** [Ano83q, Smi88, Cer00, Roj00, Spe00]. **architectures** [RH00, RH02]. **Archival** [CCR+91, Col91, BH89d]. **Archive** [WSC+88]. **Archives** [Ano79c, CCR+91, Cor90, Rei91, WSC+88, Wil89, Wil90, All91]. **Argonne** [Chu80]. **Arithmetical** [Bus82]. **Army** [BGH+91, Hil91]. **arranged** [Asi64, Asi72, Asi82]. **art** [Kin87, AWB+88]. **Arthur** [Ano82d, WT91a, WWCP92]. **Article** [BB82, Phe82]. **Articles** [Bur81]. **Artifact** [O'N92]. **Artifacts** [All91, Sei00]. **Artificial** [AMW+88, Blo87, Cop04, MK89b, FM83, FM84a, McC79]. **arts** [All91]. **Ascent** [CW91, HB90]. **Asimov** [BCKS+83, Asi64, Asi72, Asi82, CFK+91]. **Aspray** [SE86, CFK+91, CW91]. **Assembler** [BH81]. **Assemblers** [McC83c]. **Assembly** [Cou82b, McC83b, Swe83]. **Associate** [Ano83-33, Ano83-34]. **Associated** [Ano83-36]. **Associates** [TC79, Tom80]. **Association** [AWB+88, Tro87]. **Astrahan** [Wei89a]. **Atanasoff** [AMW+88, BRS+89, BHW+90, SZ84, BGH+91, BB88, BB91, Bur06, Gus00, Lee91f, Mol88, Smi10, WR81]. **Atlanta** [PAD82]. **Atlas** [Sum00]. **Atomic** [Amo90]. **Augarten** [ZT86]. **August** [Tro87, Ano86c]. **Augustus** [Fut07]. **Austin** [TLR+91]. **Australasia** [Tee83]. **Australia** [WCB90]. **Australian** [CFK+91, Pea88]. **Author** [Ano81a, Ano88e, BB82, Mor86]. **Authority** [Amo90]. **Authors** [Ano80d, Ano81g, Ano82c, Ano82i, Ano83-30, Ano83-39, Ano84h, Ano84q, Ano85h, Ano85r, Ano86k, Ano86v, ABE+81]. **Auto** [Bei75]. **Auto-** [Bei75].

**Autobiographical** [WCB90]. **Automata** [Asp90d, CFK<sup>+</sup>91]. **Automated** [Mac87]. **Automatic** [AH82, Aik82, AWL<sup>+</sup>88, Ben91, Bla80, CWM<sup>+</sup>91, DW82, Hus80a, Hus80b, Sti82a, TMRL89, Zus82a, Har46, Har85b]. **Automatics** [MZ88, Tor82b]. **Automation** [BW84, WSC<sup>+</sup>88]. **Autoscritcher** [Cra92]. **Available** [Ano79c, Nut84]. **Aviation** [Ano83a, Str83]. **Aviators** [McC91]. **Award** [Ano81i, Ano82e, Ano83-33, BGH<sup>+</sup>91, BB91, Lee91f, Ano80e, Ano81j, O'N91]. **Awarded** [Ano83-35, Cer80]. **Awards** [Ano83-34, O'N92, RS80a, Bur81].

**B** [BBC<sup>+</sup>87, BSEW83, BRG<sup>+</sup>87, BHB<sup>+</sup>89, CW84, Gal87a, Mer82, RWSW85, Ros87, Wei89b, WTZ90, Bem87, LK87, Oli87, Wei85a]. **B-5000** [BHB<sup>+</sup>89]. **B.** [CKSW83]. **B.C** [CCKSS90]. **B.C.** [Van89, Van91a, Van91b]. **Babbage** [All91, AFB<sup>+</sup>89, BCKS<sup>+</sup>83, BHW<sup>+</sup>90, BH88, CW91, Gul80, MN88b, SBET85, SHH81, WSC<sup>+</sup>88, Ano81b, Ano82f, Bab82b, BH89a, Bro82, Bro87, BRG<sup>+</sup>87, BWV<sup>+</sup>88, BHB<sup>+</sup>89, BHW<sup>+</sup>90, BDH90, CK88, CSW90, Coh88, Dub78, Fra81, Fra84, Fra85, GG92, HH80, HG79, Hym82a, Hym82b, Hym88, Lin87, Lin90, Mer82, Nag80, OLCJ91, Rob87, Swa91, Swa01, Tee83, THWV88, TW87, Van80, Van83, VBCC83, VW91, Wil81a, Wil91a, Wil91b, Wil81b, Wil87]. **Back** [ARE<sup>+</sup>87, Asp90a, CW91, KK85, WS86, Wil85e]. **background** [Zem79]. **Bakker** [Tro82b, Tro82a]. **Ballistic** [Jul82]. **Banned** [Asp85a, SE86]. **Banquet** [BH81, SWT<sup>+</sup>81]. **Bardeen** [WT91a, WIR91]. **Barry** [CW91]. **based** [Sco94]. **BASIC** [KK85, WS86]. **Basics** [Asp90a, CW91]. **Basis** [CCKSS90, Mol89]. **battle** [Bur03]. **Baum** [VBCC83]. **Bay** [Tro83b]. **BBC** [CDW92]. **Be** [Asp85a, SE86]. **Bech** [Aue84]. **Before** [CFK<sup>+</sup>91, Mil85, Asp90b]. **Began** [Val85]. **Begin** [Ano83-34]. **Beginning** [CLBdB89, Lay89]. **Beginnings** [Amo90, Luk90, WR81]. **Begins** [Ano83-33]. **Beika** [SS80]. **being** [Fut07]. **Bell** [BSEW83, Alt82, And82, Ano82a, Ano86w, Ber84, Ber87, Ran82d]. **Below** [TTB<sup>+</sup>88]. **Beniger** [AWB<sup>+</sup>88]. **Bennett** [CWM<sup>+</sup>91]. **Berkeley** [Wei88a]. **Bernstein** [WTE<sup>+</sup>85]. **Berry** [Gus00, Ber86]. **Bertram** [WTZ90]. **BESM** [BC90]. **Best** [Fut73, PW82, PW84b, PWA92]. **best-run** [PW82, PW84b, PWA92]. **Bethesda** [Blu87]. **Bettis** [Bri79]. **Between** [Bau80, Sch85]. **Beyond** [Cer89, CCKSS90, Wat90, WP00, WSC<sup>+</sup>88]. **Bibliography** [Asp87, Lee84a, Ran82e, Ran82f, Ran79, Ran80b, Zus80a]. **Bicentenary** [CFK<sup>+</sup>91, FG90]. **Bijker** [CCKSS90]. **BINAC** [Spr80, Ste79]. **Binary** [Joh83, Phi82]. **Biographical** [BCKS<sup>+</sup>83, RWSW85, Asi64, Asi72, Asi82, BWC83a, BWC83b, BWC83c, CK85]. **Biographies** [AS82, Mil85, Ula82, Wei82, Wei88a, Wei88b, Wei88c, Wei88d, WZ89, Wei89a, WK89, Wei89b, WTZ90, WG90, WCB90, WT91a, Wei91c, WIR91, Wei91b, WWCP92, BHW<sup>+</sup>90]. **biography** [CFK<sup>+</sup>91, Smi10]. **Birth** [Kis91, Lec90, Str85, SS80, Tak72, TC79]. **Birthday** [VW91, TLR<sup>+</sup>91]. **Bit** [Aug84, CWM<sup>+</sup>91, TTB<sup>+</sup>88, ZT86, Gro91b, ZT86, TB84]. **Bits** [BBB59, Luk79, BCKS<sup>+</sup>83]. **BKVAC** [AMTC80]. **Blaise** [MK89b]. **Blaise-Pascal** [MK89b]. **Bleackley** [CKSW83]. **Bletchley** [Sal00, Cop06, Goo79, Goo80]. **Bloomfield** [AMW<sup>+</sup>88]. **Blueprint** [Wal81]. **Blum** [CCR<sup>+</sup>91, Smi91]. **Blunder** [BFB82]. **BNAC** [AMTC80]. **BNF** [BHW<sup>+</sup>90]. **Bob** [O'N92]. **Böblingen** [O'N92]. **Boeing** [Por83]. **Bombe** [CFK<sup>+</sup>91, DK90]. **Bombsight** [CCKSS90, Sea89]. **Bones** [Wil83]. **Book** [BRS<sup>+</sup>89, Hawxx, CCR<sup>+</sup>91, Cer91a, OLCJ91, CCKSS90]. **Books** [CCKSS90]. **Boole** [TSD<sup>+</sup>87, Mac83]. **Boolean** [MM80]. **Born** [MK89a]. **Boschan**

- [WCB90]. **Boston** [Ano83-34, WSC<sup>+</sup>88].  
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[Noh84, OLCJ91, MHW87, SZ84]. **Celestial** [Cou82b]. **Cellar** [Bau90]. **Centenary** [MM97]. **Center** [Cur89b, WSC+88, OLCJ91]. **Centers** [BSEW83]. **Central** [Bau80, Zem80]. **Centre** [dBvV81b, Ano79c, vdPWB82]. **Century** [AAA+86, ARE+87, AFB+89, CWM+91, CW91, MN88b, Rec86, WHG+86, WS86, BWC83c, Gol77, Her88, Her95, McM84, MHR85, WL85, Cha91b, LTC+81, LB81, MHR80, Nor90, SR82]. **Ceruzzi** [TDCKW84, CCKSS90]. **Chairman** [Jon85]. **Chairs** [CK82b]. **challenge** [FM83, FM84a, Sei00]. **Change** [CLBdB89, CMF+90, CF89, Per87]. **changed** [Bur03]. **changer** [Bur06]. **Changes** [SG85]. **Changing** [CMF+90, CF89, Nat88]. **Chapter** [Mil86]. **character** [Wil91b]. **Charles** [Ano82f, BHW+90, CSW90, CW91, HG79, MN88b, VBCC83, All91, BH89a, Bro82, BH88, CK88, Dub78, GG92, Gul80, HH80, Hym82a, Hym82b, Hym88, Lin87, Lin90, SHH81, Swa91, Swa01, Tee83, Van80, WIR91, Wil81b, WSC+88]. **Charlesworth** [CWM+91]. **Charlotte** [WCB90]. **Charney** [Phi81]. **Chat** [Ano82d]. **Checking** [McC83d]. **Chevion** [Aue85]. **Chicago** [MM88]. **Chief** [Roc83b]. **China** [Til83, Mai88]. **Chino** [RL81]. **chip** [Wil70]. **Chips** [Rei88, CLBdB89]. **Chooses** [Cer80]. **Christopher** [CK85]. **chronologically** [Asi64, Asi72, Asi82]. **Chronology** [BEG+87, CCKSS90, Tim89]. **Church** [CK82b]. **cinquième** [FM84b]. **Cipher** [AWL+88, Bur81, WTE+85, Cra92, Koz84a, Koz84b, Sal00]. **CIPS** [Wil82]. **Circuit** [PAD82, Eis89, CW91]. **CIS** [WK89]. **Clark** [RS82]. **Classes** [Ano83m, BWK88]. **classification** [Bre00]. **Claude** [TWA+87]. **Clayton** [Ano82d]. **Clement** [WWCP92]. **Clifford** [Mer82, Ber86]. **Club** [O'N92, FL86, WMS+89]. **CNRS** [BMK90]. **Co** [Wat90, WP00]. **Co.** [CFK+91]. **COBOL** [Cun85a, Lee85, PCJ85, Sam85, SG85, Sch85, Str85, Wal80]. **Cod** [Wie83]. **CODASYL** [Cun85a, Jon85, PCJ85]. **Code** [Lee87c, ML87, LJWH97, WH87, Sch88]. **Code-Breaking** [Lee87c, ML87]. **codebreaking** [Cop06]. **Codes** [Cer80, SBET85, Tho79, Tho83, Wel82]. **Coding** [Ano83n, Swe83, TWA+87]. **Coevolution** [Cer88]. **Cognitive** [AWL+88, Gar85, Gar87]. **Collected** [Ano88d, AWL+88]. **Collection** [MHR80, All91, MHR85, Cer80]. **Collections** [BEG+87, Rei91, Cor90, CCR+91]. **Collectors** [O'N92, Sto82]. **College** [WK89]. **color** [Sco94]. **COLOSSUS** [Ran80a, BWV+88, Cha83, Coo83, Cop06, Flo83, Ran82j, Sal00, WG82]. **come** [Wil00]. **Comes** [BSS84, Bri79, Mor84]. **Commemoration** [BH89b, Kis91, LP81]. **Comment** [BRS+89, BB82, CS85, FW85, GGB85, Kes86, Mor86, Phe82, Ran81, TS85, GMT85]. **Commentaries** [Ano88d, AWL+88]. **Commentary** [ABE+81]. **Comments** [AMTC80, Ano79a, Ano81b, Bas83, BMC81, BSEW83, BS84, BRG+87, BEG+87, BWK88, BGR88, BWV+88, BG88, BRS+89, BHB+89, BHW+90, BDH90, BC90, BDA91, BGH+91, BW91, BHMU85, BB91, Cli85, Eva83a, FW85, GGB85, Gro91a, Hil91, KTW84, Lee91f, MKR82, Mil86, Mor86, Phe82, PAD82, PV86, Ran87, RA86, Rob87, RL81, RB85, RBZ82, RGB83, Spr80, SW80, TBLJ90, UV81, Wei85a, WMS+89, Zus80a, BRS+89, RBZ82]. **Committee** [Ano85i, ML87, Mer82, Sam80, vdPWB82, Ano83-32, CK82b, McC83a, SC85, WSC+88]. **Common** [CMF+90, Kil88]. **Commonplace** [Kid90b]. **Communication** [CMF+90, CB90, Fan88, Sha48a, Sha48b, Phi89, Yat89]. **Communications** [CK87, CF89, CMF+90]. **companies** [PW82, PW84b, PWA92]. **Companion**

[RWSW85, BWC83a, BWC83b, BWC83c].

**Company**

[CCR<sup>+</sup>91, Col91, MK89a, BH89d, Ano83i].

**Competition**

[Ano82e, CMF<sup>+</sup>90, CF89, Fla87, AWB<sup>+</sup>88].

**competitiveness** [OLCJ91]. **Compiler**

[Ano83-32, Ard86, Nut84, TTG82].

**Compilers** [All84]. **complete**

[For81, Fut07]. **Completed** [Cer80].

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[For83, Hus00]. **Comprehensive** [dLB07].

**computability** [Pet08]. **Computation**

[Ano48, Ano86c, AWL<sup>+</sup>88, Cur89b, Eck82,

MN88a, WH84, Wil85b, Eck40, EM84,

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[BHMU85, Hur85, Med88]. **Computer**

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Asp86, AdB86, AMW<sup>+</sup>88, AWB<sup>+</sup>88, Asp89b,

AFB<sup>+</sup>89, ACK89, AJ83, Bac86, BMK90,

Bar87, BP84, BSS84, Ben83, BMC81, Big80,

Bla80, BH89b, BSEW83, BCKS<sup>+</sup>83,

BRG<sup>+</sup>87, BEG<sup>+</sup>87, BDA91, Bur81, Bur80,

BB81, CK82a, CKSW83, Cer80, CW84,

Cer88, CCKSS90, CB90, CWM<sup>+</sup>91, CW91,

Chu80, CMR<sup>+</sup>83, Cza79, EM88, Fan88,

Fra81, GG82, Gro91b, Ham79, Hawxx,

Hof90, Hop87, Hur80, Jul82, Lav80a, Luk90,

Mac92b, Mai88, MHW87, May80, McC01,

MK90a, O'N92, OD84, Ran81, Ran82k,

Ran82j, Roc83a, RGB83, Ryc83, San82,

Sch85, Sch90, Sej89, Smi88, Sny80, Sta90,

SW80, Ste80c, Sti82b, Swa01, Tom85a,

TBS88, TBB90, TBLJ90, Tro80, TDCKW84,

Wad00, Wal79, WR81, WTE<sup>+</sup>85, WK89,

WCB90, WWCP92, WT91b, WT91c].

**Computer** [WS86, WLC86, WSC<sup>+</sup>88,

Zem79, Zus70, Zus80b, Zus82b, Zus84, Zus93,

dB86, Ano80b, Asp80, BL82, Buc62, BW91,

Bül88, BB88, Bur03, Bur00, Bur06, Cer83,

Cer89, Cer00, Coh00, Dor87a, FM83, FM84a,

Fla87, Fla88, Har81, Hus00, Hym82a,

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Lev85, Luk79, Mac92a, Mac99, MM82,

Mol88, Mor84, OLCJ91, PS91, Phe80, Pyl70,

PB89, RM76, Ral76, RR92, RS80b, RR83,

RRH00, Shu84, Shu96, Smi10, SA88, Sne11,

Sum00, Tom87, TWPP91, WL85, Wil85a,

Ano83-34, AWB<sup>+</sup>88, AW89, Asp00,

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Hus80b, PAD82, Ros89, TBGE89, WLC86].

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[And82, Ano80c, ARE<sup>+</sup>87, ASS87, Ber86,

Boo80, BS84, BRG<sup>+</sup>87, Bur80, Cer81,

CLBdB89, CCKSS90, CB90, CWM<sup>+</sup>91,

Cer91b, Cha91a, Cha91b, Goo79, Goo80,

HHE82, Hur81, Lee87c, Mar80, ML87,

McC91, McP84, MK90c, Nij88, Per87, Raj80,

Ran82a, Ran79, Ran80b, Ran82l, Ran82m,

Rei88, RBZ82, SE86, Sti80, SS80, Svo80,

Tak86, Tak72, Tak80, Tim89, Tom85b,

Tom87, TD88, WMS<sup>+</sup>89, Wil70, WK82,

Wil85c, Zus82a, Asp90b, Aug84, BBS86,

CKW85, Cop06, Hop00, Lav80b, Lav80c,

Nap00, OLCJ91, Oko00, Pet00, RH00, RH02,

Sco94, Ste81, Wil85e, Wil00, BSEW83,

BWV<sup>+</sup>88, BC90, CFK<sup>+</sup>91, GL81, MKR82,

Asp85a]. **Computing**

[Alt82, Amo90, Ano79d, Ano80c, Ano81k,

Ano83i, Ano83x, Ano86i, Ano89c, AWB<sup>+</sup>88,

AG89, Asp89b, Asp90b, Asp90c, Ata82,

Ata84, Bau80, Bem84, Bir80, Buc80b,

BEG<sup>+</sup>87, BG88, BHB<sup>+</sup>89, BGH<sup>+</sup>91, Bül90,

Bur81, BGvN82, Car86a, CFK<sup>+</sup>91, Cha80,

Cop04, Eva76, Gra73, Gre83, Gro91a,

Gru80b, Hil91, Hur86a, Lec90, LTC<sup>+</sup>81,

LB81, Lee91g, LP81, Mah88, Mar82, Mas83,

McP84, MHR80, MW80, MN82, Nas90,

O'N92, RS80a, Ree85, Ros90, Sam79, Sam80,

Sch82, Sch81, SR82, Ste80a, Sti82a, Sue80,

TTB<sup>+</sup>88, TD90, TLR<sup>+</sup>91, Tro87, TSD<sup>+</sup>87,

Ula80, Voo83a, Wei85b, WSC<sup>+</sup>88, Zem80,

Zus80c, vN81a, vN81b, vN88, Bur03,

CWM<sup>+</sup>91, IEE89, MW72, MHR85, Pea88,

Roj00, Wil85d, Wil97, Ano79b, Ano80a,

Ano81a, Ano81d, Ano81c, Ano81h, Ano81j,

Ano82g, Ano83-29]. **Computing**

[Ano84f, Ano84g, Ano85g, Ano86j,

CCKSS90, CFK<sup>+</sup>91, CW91, EM88, LTC<sup>+</sup>81,

MN88b, Ree82, RA86, WSC<sup>+</sup>88].  
**Computing-Tabulating-Recording** [RA86]. **Comrie** [TTG82, Tro83a].  
**Concept** [Asp90a, TDCkW84, Cer83, Tra66, AW82, CW91, RS82]. **Conception** [Slo82]. **Concepts** [Cus91, Asp00].  
**Conceptualization** [Asp85b]. **Concrete** [Tuk58]. **Conditionals** [BCKS<sup>+</sup>83, Fra81].  
**Conference** [ACM00, AFI72, Ano79c, AWB<sup>+</sup>88, Blu87, MN88a, McC83d, O’N92, RB85, SWT<sup>+</sup>81, SH79, Ste85b, Wex93, OLCJ91, Ano85f, O’N92]. **Conferences** [BEG<sup>+</sup>87, O’N91, TPG<sup>+</sup>89, TPG<sup>+</sup>89].  
**Configuration** [UV81]. **Congratulations** [ATF<sup>+</sup>88]. **Congress** [MM97, OLCJ91].  
**Connection** [NHN89, Wil87]. **Conquest** [AMW<sup>+</sup>88, Que88]. **Conservatoire** [All91].  
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**Contributors** [Ano83j, Ano83k, Ano84e, Ano85e, Ano86d, Ano86e, Ano87a, Ano89a, Ano89b]. **Control** [AWB<sup>+</sup>88, CMF<sup>+</sup>90, HHE82, RMV82, Wil81a, Yat89, Ben86, Ben91, CWM<sup>+</sup>91].  
**Controlled** [AH82, AWL<sup>+</sup>88, Har46, Har85b, Bre00, OLCJ91]. **Convair** [Ano83c].  
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**Cooperative** [Ano83-32, Arm80]. **Corbató** [O’N91]. **Corporation** [CW84, O’N91, All91, Arm83, CCKSS90, OD84, RH88, RH90, WTE<sup>+</sup>85]. **Correcting** [SBET85, Tho79, Tho83]. **Correction** [Ano83l, BDA91, RA86, BDA91].  
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**corruption** [KK85]. **Cortada** [CCR<sup>+</sup>91, Rei91]. **Couffignal** [MK89b, Ram89]. **Countess** [Hus85, HG79, Moo77]. **Country** [TBGE89].  
**Course** [Wil85b]. **Courses** [BGH<sup>+</sup>91, Gro91a]. **CPC** [UV81]. **CR** [CK82b]. **Craig** [TTG82]. **Crandall** [CMF<sup>+</sup>90]. **Creating** [ACK89, Fla88].  
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**Critical** [TLR89]. **Crossley** [CFK<sup>+</sup>91]. **cryptanalysis** [Cra92, DK85, SE86].  
**Cryptography** [MM82, Sha45, SE86, DK85, BCKS<sup>+</sup>83].  
**Cryptologia** [DKK<sup>+</sup>98]. **Cryptologic** [Sny80]. **Cryptology** [Ano82e]. **CSIRAC** [BP84]. **culture** [BWC83c]. **Cumulative** [Ano84f]. **Curtis** [Wei89b]. **Curtiss** [Tod80].  
**Customer** [Ano83m, Ano83r, Ano83w, BWK88, Smi83].  
**cypher** [Fra84, Fra85]. **Czawderna** [Buc80a]. **Czechoslovak** [Bla80].  
**Czechoslovakia** [Svo80].  
**D** [BSS84, SS80, Wei88a, Wei89b]. **D.** [GMT85, HG79, RWSW85, WTE<sup>+</sup>85]. **D.C.** [WSC<sup>+</sup>88]. **D11** [Kis00]. **Danish** [BRG<sup>+</sup>87].  
**Dartmouth** [WK89]. **DASK** [BRG<sup>+</sup>87]. **Data** [Ano83-35, Ano85f, BBB59, CK87, CW84, CCR<sup>+</sup>91, EZB83, Har83, Kis91, LS83, Mil85, Rei91, WSC<sup>+</sup>88, Cor90, FMM83, Kis00, MM82, Phi89].  
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BWK88, BGR88, BWV<sup>+</sup>88, BG88, BRS<sup>+</sup>89, BHB<sup>+</sup>89, BHW<sup>+</sup>90, BDH90, BC90, BDA91, BGH<sup>+</sup>91, BW91, BB91, FW85, GGB85, Gro91a, Hil91, KTW84, Lee91f, MKR82, Mil86, Mor86, Phe82, PAD82, PV86, RA86, Rob87, RL81, RB85, RBZ82, RGB83, Spr80, SW80, UV81, Wei85a, WMS<sup>+</sup>89, Zus80a]. **Debugging** [BH81, TTB<sup>+</sup>88, Voo83b]. **Decade** [LA91]. **December** [HEA<sup>+</sup>83, MM97]. **Deciphered** [Ano81e, Rej81]. **Decision** [BHB<sup>+</sup>89]. **decisions** [Pug84]. **dedicated** [Zem79]. **Dedication** [Ano83o]. **Defense** [Ano82a, Bou90, EZB83, Arm83, McC83f]. **Defines** [BSEW83]. **Definitions** [Tor82b]. **Degree** [Cer80, Ros84a]. **Degrees** [WTE<sup>+</sup>85, Ber84, Ber87]. **DEHOMAG** [Kis00]. **Delay** [O'N92]. **Demise** [Str85]. **Demonstration** [LP81, Wor82]. **Denk** [CWM<sup>+</sup>91, Bül88]. **Department** [Ano48, MZ88]. **Design** [AJ83, Bar87, BGvN82, Flo83, LK87, PAD82, Tak80, TKE90, Wil81a, CKW85, Hus00, MM82]. **detective** [Fut73]. **Deterrence** [Mac92b, Mac92a, Mac99]. **DEUCE** [Wil80b]. **Deutsches** [MZ88, OLCJ91, WSC<sup>+</sup>88]. **Development** [Ano83-33, AWL<sup>+</sup>88, Bau80, Big80, CK82a, Chu80, Cus91, ESB80, Eve86, Hei91, Hur80, Kis91, KT80b, Lav80a, Luk90, Mac91, Obl80a, Slo82, Val85, Zus82b, dB86, Har81, MKW92, PB87, TDCKW84]. **Developments** [Ano88b, AWL<sup>+</sup>88, Bir80, Mai88, McC83b, MM80, San82, WTE<sup>+</sup>85, Wil80a, Ano80b, Har47a, Har84, Phe80]. **Devices** [Mau82b]. **Devouring** [CW91, Jen90]. **diatoms** [Sma46]. **Dictionary** [Ano83-35]. **Did** [Ham80]. **Difference** [AFB<sup>+</sup>89, BCKS<sup>+</sup>83, CW91, TBGE89, TW87, Lin87, Lin90, Swa91, BRG<sup>+</sup>87, Coh88, Fra81, Rob87, Swa01]. **Differential** [LS83, MRFS87]. **Diffusion** [Asp86, AWL<sup>+</sup>88, CW91, MK90b, RvN85, PB87, RUvN47]. **Digest** [Mil85]. **Digital** [AB82, Ano48, Ano80c, AWL<sup>+</sup>88, Ata84, Bar87, Bau80, BMC81, Bla80, CCKSS90, Gre91, Gru80b, Har47b, Har51, Har85a, Mar80, MHS82, Ran79, Ran80b, Ran82k, Ran82l, SW80, Ste80a, TG91, TDCKW84, WR81, WK82, CKW85, Cer83, Hop00, Smi10, All91, Ano81j, Ano81k, Ano82g, Bur81, Cer80, O'N91, RH88, RH90]. **Dijkstra** [TLR<sup>+</sup>91]. **dimension** [MM82]. **Directions** [BHP87, CCKSS90, Gre81]. **Director** [Ano83-34, Ano81j, Ano83-33]. **discoverers** [Nat88, CLBdB89]. **Discovery** [Dor84]. **Discussion** [ABE<sup>+</sup>83, Asp89a, BBC<sup>+</sup>87, BGR88, BGvN82, HOAS84, TBB<sup>+</sup>83, TWPP91]. **Disk** [TBGE89]. **District** [Pet83]. **Dits** [BCKS<sup>+</sup>83, Luk79]. **Dively** [Wei89a]. **d'Ocagne** [ARE<sup>+</sup>87]. **Documentation** [Lee91g]. **DODCI** [WD85]. **Does** [BHW<sup>+</sup>90, Ros84b]. **Don** [AS82]. **Donald** [CFK<sup>+</sup>91]. **donates** [All91]. **Doran** [AWL<sup>+</sup>88]. **Dorfman** [AFB<sup>+</sup>89]. **Dorothy** [ZT86]. **Douglas** [Ano83i, Bak83, Med88, Sch83]. **Dov** [Aue85]. **downlink** [Sco94]. **Dr** [Mer82, dBvV81b]. **Dr**. [TBLJ90]. **Draft** [vN82]. **Drafting** [SW80]. **dramatic** [Wil91b]. **Dream** [CDW92, PS91]. **Drum** [HK86, Tri86]. **DSDPS** [Jon89]. **Dual** [Ano83n]. **Dubbey** [HG79]. **Dudley** [THWV88]. **Duncan** [CCR<sup>+</sup>91, Smi91]. **Dusen** [Fut07]. **Dutch** [BWV<sup>+</sup>88]. **Dvorak** [WTE<sup>+</sup>85]. **Dynamic** [Sak84]. **DYSTAT** [Sak84].

**E.** [LS82, TDCKW84, WTE<sup>+</sup>85]. **E.T.** [Lec90]. **Early** [All84, And82, Ano79a, Ano80c, Ano83l, Ano85f, Ard86, AG89, Bac84b, Bau80, BP84, Ber86, Bri84, BEG<sup>+</sup>87, BWV<sup>+</sup>88, BG88, BDA91, BGH<sup>+</sup>91, Bül90, BHMU85, CK80a, CK80b, Cer81, CW91, Dij80, ESB80, GL81, Goo79, Gro91a, Hug84, Hur81, Hur85, Hus91, Kes80, KT80b, Lav80b, Lav80c,

Mau84, MKR82, McC91, McC84, McP84, Med88, MN82, MJ84, MK90c, Nor90, Phe80, PCJ85, Raj80, RBZ82, Sam85, San82, Sch81, Sti80, Sue80, Tak86, TBB90, WMS<sup>+</sup>89, WCB90, Wil80a, WSC<sup>+</sup>88, Jon89, Phi89, Roj00, Ano80b, BSEW83, BWV<sup>+</sup>88, CK81]. **Eckert** [GMT85, MHW87, Ste81]. **Eckert-Mauchly** [Ste81]. **Ecological** [BHB<sup>+</sup>89]. **Economic** [AWB<sup>+</sup>88, Ben86, FMM83]. **ed** [Ano88d, ARE<sup>+</sup>87, AMW<sup>+</sup>88, AWL<sup>+</sup>88, AWB<sup>+</sup>88, CSW90]. **Eden** [CW91, Ros89]. **Edited** [Hur81]. **Editor** [Ano83c, Ano83q, Ano83p, Ano83o, Ano83r, Ano83s, Ano83t, Ano83u, Ano83v, Ano83w, Ano83x, Ano83y, Ano83d, Ano83a, Ano83b, Ano86a, Ano86h, Ano86f, Ano86g, Ano86p, CCR<sup>+</sup>91, Cer91a, GGB85, Str65]. **Editorial** [Ano81f]. **Editors** [Ano88a]. **Edmund** [Wei88a]. **Edouard** [KTW84]. **eds** [AWL<sup>+</sup>88, CCKSS90, CMF<sup>+</sup>90, WLC86]. **EDSAC** [Ano79c, CK80a, CK00, Dou79, PV86, WR82, Wor82]. **Edsger** [TLR<sup>+</sup>91]. **Education** [Ano83m, BWK88, Hop87, Ros84a, RWSW85]. **Educational** [Her86]. **EDVAC** [Mau82a, SW80, vN82]. **EDVAC-type** [Mau82a]. **Edvard** [AFB<sup>+</sup>89, CW91, Lin87, Lin90]. **Edward** [Ber86, BH89c]. **Edwards** [Bur81]. **EE** [RWSW85, Ros84a]. **Effects** [Hug86]. **effektivnogo** [PW86]. **Effort** [Arm80]. **efforts** [SS10]. **Eighteen** [Gru80a]. **Eisler** [CW91]. **Election** [TD88, TD88]. **Elections** [TD88]. **Electric** [Hol82a, Gro83, TBS88, TBLJ90]. **Electrical** [ARE<sup>+</sup>87, HHE82, Ste85b, WS86, WSC<sup>+</sup>88, McM84, OLCJ91, WL85]. **Electromechanical** [Tor82a]. **Electronic** [AMW<sup>+</sup>88, Ata84, BMC81, BB81, BGvN82, GG82, Hol82b, LS83, Lec90, MHS82, RMV82, Ran82a, Ran81, Ran82k, Ran82m, Sch90, ST82, SW80, Ste80a, SS80, Svo80, Tak72, Tom85a, WK82, Ano80b, BB88, CKW85, Lan00, Luk79, Pet00, Phe80, Sto82, Wil85e]. **Electronics** [Aus81, Cer88, Ele81, WCB90, Zus82b, SWT<sup>+</sup>81]. **Electrons** [Eck82]. **Elegance** [Tho80a]. **Eloge** [Add84, Aue84, Aue85, BKM84, Bro81, FW88, LS82, Obl80b, Phi81, WZ89, WWCP92, Zem82]. **Emergence** [Dav84, Hei84]. **empresas** [PW84a]. **Encounter** [Por83]. **Encyclopaedia** [McN90, McN96]. **Encyclopedia** [BSS84, BCKS<sup>+</sup>83, CFK<sup>+</sup>91, RM76, Ral76, RR92, RR83, RRH00, Tom87, Asi64, Asi72, Asi82]. **End** [CW91, Ste84, Ros89]. **Ending** [Ray89]. **Energy** [Amo90]. **Engine** [BCKS<sup>+</sup>83, BRG<sup>+</sup>87, Rob87, Swa91, Bab82b, Bab82a, Bro82, Coh88, Fra81, Ran82k, Swa01, TBGE89, TW87]. **Engineer** [TPG<sup>+</sup>89, WWCP92]. **Engineering** [Ano83i, Ano83s, Ano86h, ARE<sup>+</sup>87, Ste85b, TPG<sup>+</sup>89, WMH82, WS86, Hal09, McM84, OLCJ91, RR83, WL85, BSS84, OLCJ91, TC79, Tom80, WSC<sup>+</sup>88]. **Engineers** [CCR<sup>+</sup>91, Lub91, Sto82, Vin90, Vin93, O'N92]. **Engines** [AFB<sup>+</sup>89, BSS84, Bro87, CW91, Ran82c, Shu84, Shu96, Lin87, Lin90, Wil91a]. **ENIAC** [Ran81, TDCKW84, VBCC83, BEG<sup>+</sup>87, Bur80, BB81, BB82, Eck80, GG82, Led82a, Led82b, Led83a, Led83b, Led83c, Led83d, Mau80, MHW87, McC01, Phe82, Ste80d, Ste81, TB84, VTAA00, WG82]. **Enigma** [Ano81e, AWL<sup>+</sup>88, CK84, CWM<sup>+</sup>91, Eni90, WTE<sup>+</sup>85, Hod83a, Hod83b, Hod85, Hod00, BEG<sup>+</sup>87, Cop04, Cra92, Koz84a, Koz84b, Rej81, TDCKW84, Wel82]. **Enough** [CFK<sup>+</sup>91, DK90]. **Entering** [BL82, CKSW83]. **enterprise** [MR85a]. **Enters** [CCKSS90, TBS88, Cer89]. **Entrepreneur** [CCKSS90, RH88, RH90]. **Epilogue** [Eve83b, Gal87b, Hur83b, Hur86b]. **Equation** [LS83]. **Equations** [Ata82, Hun86, MRFS87]. **Equipment** [All91, Ano83-36, CCKSS90, O'N91, RH88, RH90]. **ERA** [AMTC80, TC79, Tom80].

**Errata** [Ano88b]. **Erratum** [Wei91d].  
**Error** [SBET85, Tho79, Tho83].  
**Error-Correcting** [SBET85, Tho79, Tho83].  
**Errors** [BDH90, MW80, MW72]. **Ershov** [KT80a, WG90]. **Erwin** [Ano81i, OLCJ91].  
**Esq** [BH88]. **essay** [MHR85]. **Essays** [KTW84, MHR80, Tor82b, MHR85].  
**Essential** [Cop04]. **Esser** [CB90, Otn89].  
**Established** [Ano82e]. **Estados** [PW84a].  
**estimate** [Mer82]. **etc.** [Fut07]. **ETH** [Spe00]. **Eugene** [BH89c]. **Eulogy** [Arm80, Ton80]. **Europe** [Bau80, MK89a].  
**European** [BWV+88, O'N92, Zem80].  
**Evans** [LTC+81, O'N92]. **Evolution** [Bro87, CCKSS90, Cou82a, SS80, TKE90, Wel80, FI78, IEE89, Shu96]. **Examined** [BS84]. **excelencia** [PW84a]. **excellence** [PW82, PW84b, PW85, PWA92, BCKS+83].  
**Excerpts** [SWT+81]. **Exchange** [RS80a].  
**Execution** [Zus82a]. **Exhibit** [Bur81, Lee84c, CW84]. **Exhibition** [BRG+87, OLCJ91]. **Expands** [Hur86a].  
**Expectations** [TW87, Wil91a]. **expense** [Mer82]. **Experience** [Bri84, Her86, Tom87, CWM+91].  
**Experiences** [Ano83r]. **Experimental** [Sch90]. **exploring** [PS91]. **Expressions** [MM80]. **Extent** [Tor82b]. **Eyewitness** [TBGE89].

**F** [Fut07]. **F.** [CW84, Hei91, SBET85].  
**F.R.S** [Fut07]. **F.R.S.** [BH88]. **fabric** [Sta85, Sta89, CCKSS90]. **Factory** [Cus91].  
**Facts** [Cun85b]. **failed** [Gla91]. **Failure** [AFB+89, CW91, Lin87, Lin90]. **Falkoff** [SS80]. **Fall** [WTE+85, OD84]. **family** [Hop00]. **Fang** [CB90]. **Farr** [Mer82]. **Fast** [TD88]. **Father** [CFK+91, Wat90, WP00, Coh88, Mol88].  
**Fauvel** [CFK+91]. **Favorite** [TPWW92].  
**February** [Ano85f]. **Federal** [Pet83, Ree85].  
**Feigenbaum** [TDCKW84]. **Fellowship** [Ano81j, Bur81, CK82b, RS80a, OLCJ91].  
**Fernando** [O'N91]. **Fernbach** [WIR91].

**Festkolloquiums** [Gra73]. **Few** [CLBdB89, Cun85b, Lun87]. **Feynman** [Wei88b]. **Field** [Knu86]. **Fieldata** [Hum87].  
**Fifteenth** [CFK+91]. **Fifth** [Asp85a, Fin84, SE86, TDCKW84, FM83, FM84a]. **Fifty** [OLCJ91]. **Film** [Ano79c, Ano79d, Lee84c].  
**Final** [HEA+83]. **Finerman** [Bur81]. **Fire** [HHE82, RMV82]. **Fireside** [Ano82d]. **First** [Ano80c, AMW+88, AW89, BH81, BMC81, BS84, BGR88, BB81, CCKSS90, Haw88, Hol82b, Lee86, LA91, Mar80, McC01, Por83, Ran81, Rec86, Ros83, RGB83, SW80, Swa01, TTB+88, TLR89, TWPP91, WMS+89, WWCP92, vN82, BL82, BRG+87, BB88, Bur00, Hor82, Oko00, RH00, RH02, SA88, Wil85e, Wil00, AFI72, vdPWB82]. **Fisher** [CW84]. **five** [ARE+87, Wil85e]. **Flamm** [CMF+90, AWB+88, ACK89]. **Flew** [Ver90].  
**Flight** [BRG+87, CCKSS90, Cer89].  
**Florence** [WCB90]. **Flowers** [WG82].  
**Floyd** [O'N92]. **Fontana** [RWSW85, BWC83a, BWC83b]. **force** [Tra84]. **Forester** [SR82]. **Forester.** [CCKSS90]. **Foreword** [Boo81, Fin79].  
**Forgotten** [Aus82, Mol88]. **form** [Wil91b].  
**Formal** [Gre81]. **Formative** [Von89].  
**Forrester** [Eva83d]. **Fort** [Ano83c].  
**FORTTRAN** [Ada84, All84, AW82, Bac79, Bac84b, Bem84, Bri79, Bri84, BDH90, Dav84, Gol84, Gre84, Hei84, Hug84, KTW84, Knu84, Lee84a, Lee84c, McC84, Noh84, RL81, Ros84b, Smi84, Tro84].  
**FORTTRANSIT** [Hem86]. **Forty** [CWM+91]. **Founders** [AAA+86].  
**Founding** [MB80]. **four** [Ers80]. **Fourier** [BHW+90]. **France** [CW91, Ano89c, BGR88, MK90b, MK90c, Ram89, Ver89, WSC+88].  
**Franken** [BCKS+83, SBET85]. **Frederick** [Buc83]. **Free** [BW91]. **French** [BMK90, BGH+91, Hil91, Hof90]. **Frenkel** [CFK+91]. **Friedrichs** [Buc83]. **Friend** [BDH90]. **Front** [Ano83z]. **Frontiers** [TLR+91]. **FSQ-7** [AJ83]. **Fuller** [Mer82, CFK+91, FG90]. **Fully** [Tom85a].

- Fumbling** [AW89, SA88]. **Function** [Kle81]. **Functional** [Bar87]. **Fungus** [CW91, Jen90]. **Further** [BDA91, McC83b]. **Futrelle** [BCKs+83]. **Future** [AW89, Zem90a, Zem90b, KK85, SA88, Sob86, Wil85e, TSD+87].
- G** [GMT85, LS82, LTC+81, Phi81, WG82, WS86, Hus84]. **G-15** [Hus84]. **G.** [BCKs+83]. **G1** [Hop00]. **Galler** [Ano80e]. **Gallery** [WSC+88]. **Game** [Mac92b, Mac92a, Mac99]. **Gamma** [Lec90]. **Garcia** [WCB90]. **Gardner** [AWL+88]. **GAT** [Ard86]. **General** [BSEW83, BB81, Ran81, Sam79, MHS82, Gro83, Ryc83, TBS88, TBLJ90]. **General-Purpose** [BSEW83, BB81, Ran81, MHS82]. **Generation** [Asp85a, SE86, FM83, FM84b, FM84a, Wil00, TDCKW84]. **Genese** [CW91, MK90b]. **Genesis** [BP84, Wil86]. **Genius** [Mac92b, Mac92a, Mac99]. **geological** [Sma46]. **Georg** [AFB+89, Lin87, Lin90]. **George** [TSD+87, Hol82b, Mac83, Wei88b, Wei89a]. **Gerdes** [CFK+91]. **German** [AWL+88, WTE+85, Bü190, Cra92, Gra73, Koz84a, Koz84b, Sal00, Zus80b]. **Germany** [O'N92, Pet00, Zus80c, dB86]. **Geschichten** [Bü188, CWM+91]. **gestionadas** [PW84a]. **Giant** [Aus82]. **gift** [Coh88]. **Given** [McC83e]. **Glaisher** [Mer82]. **Glory** [AFB+89, CW91, Lin87, Lin90]. **Glossary** [Bou89]. **Glushkov** [PAD82, Zem82]. **GMD** [Bur81]. **Go** [Dav84]. **Godfather** [Ran82j]. **Goldberg** [Wei89a, CSW90]. **Goldstein** [Wei89b]. **Goldstine** [Ano81e, SWT+81]. **Good** [CLBdB89, Lun87]. **Goode** [Aue86a]. **Gordon** [Wei89b]. **Gorn** [WWCP92]. **Göttingen** [Hop00]. **Government** [AWB+88, ACK89, Nor90, WSC+88, Fla87, Fla88, CW91]. **Grace** [O'N92]. **gradual** [BMK90]. **Graduate** [Sha89, TPG+89]. **Graef** [Ano80c, Buc80b]. **Grants** [O'N92]. **Graphical** [ARE+87, dO86]. **Great** [Fut76, Gor86, Hal09, Asi64, Asi72, Asi82]. **Greece** [Asi64]. **Grenoble** [Kun90, MK90a, Ver90]. **Grist** [FW88, Wei88c]. **Grosch** [CWM+91]. **Group** [HEA+83, O'N92, Roc83a]. **Groups** [BDA91, TBB90, Tho79, Tho83, SBET85]. **Guard** [THWV88]. **Guide** [CCR+91, Col91, Rei91, BH89d, Cor90, For81, MM82, Sto82, CCR+91]. **guided** [Pet08]. **Guidelines** [Ano80d, Ano81g, Lee91g].
- H** [Ano81e, Ano82d, Ano83-31, Aue86a, BCKs+83, Buc80a, GL81, SWT+81, SBET85, Wei88b, WG82]. **H.** [BCKs+83, CKSW83, SWT+81, SS80]. **Hack** [TPWW92]. **Hackers** [Lev84, Lev85, WTE+85]. **Hairdressers** [GG90]. **HAL** [TPWW92]. **Half** [AFB+89, Her88, Her95]. **Half-Century** [AFB+89, Her88, Her95]. **Hall** [CW91, WSC+88]. **Halpern** [Wei91d]. **Hamilton** [Tod80]. **Hammer** [Ano82d, CK82b]. **Hamming** [Cer80]. **Handbook** [dLB07]. **Hanf** [WTZ90]. **Happenings** [Lee87c, Lee89e, Lee90d, Lee90e, Lee90f, Lee90g, Lee91h, Lee91j, ML87, MHW87, MN88a, MN88b, MZ88, MM88, Mau89, O'N91, OLCJ91, O'N92]. **Happy** [VW91]. **Hardware** [Hus00, Mor84]. **Harold** [Bro81]. **Harrar** [CCKSS90]. **Harriett** [WTZ90]. **Harry** [Aue86a]. **Hartree** [Ano88b, WTE+85, AWL+88, Med88]. **Harvard** [Ano48, Ano82f, AWL+88, Coh88, Sam91a, WH84]. **Hawkhill** [CCKSS90, Hawxx]. **Hazen** [Bro81]. **heels** [Hal91, Wei91d]. **Heinz** [Tro85]. **held** [GIS90]. **Helm** [Ano82d]. **Helmut** [Lan00, Tom85a]. **Hempstead** [GIS90]. **Henle** [WZ89]. **Henry** [Ano82d, CFK+91, Coh88]. **Heppenheimer** [CW91]. **Herbert** [BDA91, Wei88a].

**Heritage** [Tee83]. **Herken** [AFB<sup>+</sup>89]. **Herman** [Aus82, Kis91, Ton80]. **heroes** [Lev84, Lev85]. **Hexadecimal** [BRG<sup>+</sup>87, BEG<sup>+</sup>87]. **High** [ACK89, CCKSS90, CCR<sup>+</sup>91, CW91, Col91, For87, Mau82b, Nor90, vN81a, BH89d, Fla88, Pen89, Pen90, Sei00]. **High-Speed** [vN81a]. **High-Tech** [CCKSS90, For87, CW91, Pen89, Pen90, Sei00]. **high-technology** [BH89d]. **Highlights** [Ros84c]. **Hinsley** [SBET85]. **historian** [Cer00]. **historians** [Sto82]. **Historic** [Ano79d, Pet08]. **Historical** [Ano83-33, Bas82, CCR<sup>+</sup>91, Col91, Gre91, MM80, Smi88, TG91, WT91b, WT91c, All91, BH89d, Sei00, Ano83-35]. **Historiography** [May80]. **History** [ACM00, Ano79b, Ano80a, Ano81a, Ano81d, Ano81e, Ano81c, Ano81h, Ano81k, Ano82g, Ano83-29, Ano84f, Ano84g, Ano85g, Ano86b, Ano86i, Ano86j, Ano89c, AW82, Asp87, AWL<sup>+</sup>88, AWB<sup>+</sup>88, AW89, AJ83, Bac79, Bei75, BHP87, Blu87, BD90, BRG<sup>+</sup>87, BRS<sup>+</sup>89, BHW<sup>+</sup>90, Bül90, Bur81, CK82b, Car86b, CSW90, CCKSS90, CMF<sup>+</sup>90, CCR<sup>+</sup>91, CFK<sup>+</sup>91, Cha80, DKK<sup>+</sup>98, EM88, Gol88, GH85, Gru79, Gru80a, Gru80b, Gul80, Led82b, LTC<sup>+</sup>81, LB81, Lee91g, Leh80, LA91, Lub91, Mah88, MN88a, McC84, McN90, McN96, MHR80, MW80, Nas90, O<sup>^</sup>N92, OH84, Pai90, RWSW85, Rei91, RL81, Ros84c, SWT<sup>+</sup>81, Sam79, Sam80, Sam85, Sam91d, SR82, Smi91, Ste79, SH79, Sue80, SS80, Tro80, TA81, TSD<sup>+</sup>87, Wex81, Wex93, Wil79, Wil82, Wil85b, Wil85c, WSC<sup>+</sup>88, Zus80c, dLB07]. **History** [de 84, Asp00, Aug84, Bur03, CK89, Cor90, FMM83, Gar85, Gar87, Gol77, KK85, Kis00, Lay89, LT89, Luk79, MKW92, McC79, MW72, MHR85, OLCJ91, Pea88, RS80b, RH00, RH02, Sam91a, Shu84, Sma46, Ste80d, VTAA00, Vin90, Vin93, Wil85d, Wil97, Win98, All91, Ano81i, Ano82g, BSEW83, BWK88, CCR<sup>+</sup>91, CFK<sup>+</sup>91, Fla91, RS80a, TDCKW84, WSC<sup>+</sup>88].

**Hocheiser** [CCR<sup>+</sup>91, Col91]. **Hodges** [TDCKW84, CK84]. **Hoelzer** [Lan00, Tom85a]. **Hofstra** [GIS90]. **Hollerith** [Aus82, Kis91, RA86]. **Home** [THWV88]. **Honor** [CK82b, WR81]. **Honorary** [Cer80]. **Honored** [Tro85]. **HOPL** [BH81, O<sup>^</sup>N92, Wex93, Ano81j, SH79]. **HOPL-II** [O<sup>^</sup>N92, Wex93]. **Hopper** [O<sup>^</sup>N92]. **Hord** [BCKS<sup>+</sup>83]. **House** [UV81]. **Howard** [AA85b, Coh00, WH84]. **Howell** [CLBdB89]. **Hughes** [CCKSS90]. **Hull** [CKSW83]. **Human** [CCKSS90, Cer91b, Sta85, Sta89]. **Huskey** [WT91a]. **Husson** [TDCKW84]. **Hut** [BCKS<sup>+</sup>83, Wel82]. **Hyman** [VBCC83, CSW90]. **Hypergrowth** [OD84, WTE<sup>+</sup>85].

**I.** [BCKS<sup>+</sup>83]. **I/O** [GM85]. **IBM** [Ano80b, Ano83z, Aus81, CW84, CMF<sup>+</sup>90, GM85, Hur83c, MKR82, Noh84, TDCKW84, TSD<sup>+</sup>87, Ano83-27, Ano83-36, Ano86o, Bas83, BEG<sup>+</sup>87, BWK88, CW84, FMM83, FW85, Gal86d, Gla86, Gor86, GGB85, Hae86, HK86, Her86, Hug86, Hur80, Hur81, Hur83a, Hur83c, Hur86a, Joh83, Kil88, Knu86, LS83, LH86, Lee84c, Mas83, O<sup>^</sup>N92, Phe80, Pug84, Ran82b, RBZ82, Ryc83, ST82, SN86, Smi83, SS10, Sob86, Swe83, TD88, Tri86, Ver89, Voo83b, Wat90, WP00, WCB90]. **ICL** [CFK<sup>+</sup>91, CK89, Fla91]. **Ideas** [CW91, Pen89, Pen90, Per86, TKE90]. **identification** [BW91]. **IEEE** [WSC<sup>+</sup>88, CCKSS90, O<sup>^</sup>N92]. **IFIP** [FL86, Aue86b]. **Ignored** [AW89, SA88]. **II** [O<sup>^</sup>N92, Wex93, Bac79, Hei84, Phi89]. **II.vi.5** [CH90]. **III** [Bac79]. **Illiac** [BCKS<sup>+</sup>83, Rob80, Hor82]. **illustrate** [Sma46]. **Illustrated** [CCKSS90, Tim89, Aug84]. **Illustrations** [Sam91d]. **image** [AF85, CFK<sup>+</sup>91]. **Impact** [Ano88b, AWL<sup>+</sup>88, Gre84, WTE<sup>+</sup>85, For81, Har47a, Har84, Wil85e]. **implementation**

[MM82]. **implementations**  
 [KTW84, Knu84]. **implications** [Sco94].  
**Important** [Tak80]. **Impossible**  
 [SHH81, TTB<sup>+</sup>88, Str65]. **Impressions**  
 [Bac80, AWB<sup>+</sup>88, Cad86]. **Inaccessible**  
 [Gre91, TG91]. **inaugural** [Har47a]. **Inc.**  
 [TC79, Tom80]. **Inca** [Asc83]. **Incident**  
 [TLR89]. **Increase** [Ano83e, Ano83f]. **Index**  
 [Ano81a, Ano82b, Ano83-28, Ano83-29,  
 Ano84f, Ano84g, Ano85g, Ano86i, Ano86j,  
 Ano87b, Ano88c, Ano88e, Ano88f, Ano88g,  
 Ano88h, Ano89d, Ano90, Ran82f, Ran82h,  
 Tim89, CCKSS90]. **Indexes**  
 [Ano81h, MHR85]. **Indices** [Ano88g].  
**industrial** [Ben91, CWM<sup>+</sup>91, Pet00].  
**industries**  
 [Ben91, CWM<sup>+</sup>91, Dor87a, AFB<sup>+</sup>89].  
**Industry**  
 [ACK89, Bou90, Ben91, BL82, CWM<sup>+</sup>91,  
 FMM83, Fla88, Pug84, CW84, WTE<sup>+</sup>85].  
**Influence**  
 [Mac91, Ste80a, HT79, HH79, Zem79].  
**Informatica** [dBDvdR71]. **Informatics**  
 [Blu87, BD90, Bou90, Kun90, MZ88, Ram89,  
 Smi91, Tro82b, CCR<sup>+</sup>91]. **Information**  
 [Ano81k, Ano83-28, Asp85b, AWB<sup>+</sup>88,  
 Aus82, CLBdB89, CMF<sup>+</sup>90, CW91, Gre91,  
 Gul80, O'N92, TG91, WTE<sup>+</sup>85, WK89,  
 WSC<sup>+</sup>88, Zem90a, Zem90b, dLB07, Ben86,  
 Ber84, Ber87, For87, LT89, OLCJ91, Pen89,  
 Pen90, Per87, BSEW83, SN86].  
**informatique** [CW91, MK90b]. **initial**  
 [Wad00]. **Inmos** [AWL<sup>+</sup>88, MR85a, MR85b].  
**Innocence** [CW91, Ros89]. **Innovation**  
 [AWL<sup>+</sup>88, AFB<sup>+</sup>89, Dor87a, Ele81, CW91,  
 MK90b, PB87, SWT<sup>+</sup>81]. **input** [Wad00].  
**inquiry** [McC79]. **Installation**  
 [Ama83, Ano83t, Ano83w, Cha83, MP83,  
 Ros83, Til83, Zus80b]. **Institut** [MK89b].  
**Institute** [GIS90, Gul80, MN88b, Obl80a,  
 WSC<sup>+</sup>88, All91, Asp00, Big80]. **Institution**  
 [O'N92, WSC<sup>+</sup>88, All91]. **institutional**  
 [BMK90]. **Institutionalization** [Ada84].  
**Institutions** [McP84, Coh88]. **Instructions**  
 [Ano82c, Ano83-30, Ano84h, Ano85h,  
 Ano86k]. **Instrument**  
 [BGvN82, Ben91, CWM<sup>+</sup>91]. **Instruments**  
 [Ano88b, AWL<sup>+</sup>88, Har49, WTE<sup>+</sup>85, Wil83,  
 Har50, Har53, Har84]. **Integrator** [GG82].  
**Intelligenz** [CWM<sup>+</sup>91]. **Intelligence**  
 [AMW<sup>+</sup>88, Blo87, Cop04, MK89b, SBET85,  
 FM83, FM84a, HT79, HH79, Hin93, Hod85,  
 McC79]. **Intelligenz** [Bül88]. **Interaction**  
 [Ula80]. **Interest** [O'N92]. **Intermediate**  
 [Ano85i, SC85]. **Intermediate-Range**  
 [Ano85i, SC85]. **International**  
 [Asp86, AWB<sup>+</sup>88, BH89b, CMF<sup>+</sup>90,  
 OLCJ91, dBvV81b, CF89, Fla87, dBvV81a].  
**internationally** [BGR88]. **Internet**  
 [Win98]. **Interpolator** [Ces82]. **Interpreter**  
 [Ano86w]. **Interview**  
 [TBLJ90, TWA<sup>+</sup>87, WTZ90]. **Interviews**  
 [BH89c, AA85a]. **intricate** [Fut07].  
**Introduction**  
 [Ano82d, Eva83b, Lee85, Ran82g, TBS88,  
 TWA<sup>+</sup>87, Wil88, WSC<sup>+</sup>88, Yau86].  
**introductory** [MHR85, Sma46]. **Invented**  
 [AW89, SW80, Bur03, Smi10, SA88, Sne11].  
**Inventing** [BMC81]. **Invention**  
 [BRS<sup>+</sup>89, Hei91, Kis91, TTB<sup>+</sup>88, Wei85b,  
 Hal09, Lea05]. **inventor** [Lan00]. **Inventors**  
 [Bül90, CLBdB89, Nat88]. **Inventos**  
 [LTC<sup>+</sup>81, San80]. **Invested** [Car86b].  
**Invited** [Ano83-33]. **Involvement**  
 [WSC<sup>+</sup>88]. **Inyokern** [Til83]. **IPM**  
 [DW82, dB86]. **Irving** [TWA<sup>+</sup>87]. **Islamic**  
 [AA85b]. **Issue** [Ano84a, Ano84b, Ano84c,  
 Ano85a, Ano85b, Ano85c, Ano85d, BDH90,  
 Eve83a, Gal79a, Gal79b, Gal80a, Gal80b,  
 Gal80c, Gal80d, Gal81a, Gal81b, Gal81c,  
 Gal81d, Gal82a, Gal82b, Gal82c, Gal82d,  
 Gal83a, Gal83b, Gal86c, Gal86a, Gal86b,  
 Gal87a, Hur83a, Hur86a, LT84, Lee87a,  
 Lee87b, Lee88a, Lee88b, Lee88c, Lee88d,  
 Lee89a, Lee89b, Lee89c, Lee89d, Lee90h,  
 Lee90a, Lee90b, Lee90c, Lee91a, Lee91b,  
 Lee91c, Lee91d, TDCKW84, Wei91a, Lee85].  
**issued** [OLCJ91]. **Italian** [BG88]. **IV**

[BCKS<sup>+</sup>83, Hei84, Hor82]. **Ivar** [Aue84].  
**Iverson** [SS80].

**J** [BCKS<sup>+</sup>83, CKSW83, CW84, GMT85, Mer82, O'N91, TWPP91, Tro82a, Tro83a, WTE<sup>+</sup>85, WTZ90]. **J.** [BCKS<sup>+</sup>83, Eva83c, HG79, LTC<sup>+</sup>81, SWT<sup>+</sup>81, Tro82b, Tro82a, WTE<sup>+</sup>85, WG82, WS86]. **J.C.R.** [CW91].  
**Jacobs** [BKM84]. **Jahre** [Gra73]. **James** [GND<sup>+</sup>87, Wei89a]. **Jan** [Wei89b, WTZ90].  
**January**

[ACM00, Ano48, AWB<sup>+</sup>88, Har85a, Ano85f].  
**Japan**

[AFI72, Bei75, Tak72, TSD<sup>+</sup>87, AFI72, FM83, FM84a, Sob86, Sue80, SS80, Tak86].  
**Japanese** [Oko00, Tak80]. **Jay** [Eva83d].

**Jennings** [CW91]. **Jersey** [MN88a]. **Jessie** [WCB90]. **Joel** [BSS84]. **Johann**

[AFB<sup>+</sup>89, CW91, Lin87, Lin90]. **John** [TTG82, Asp80, Asp89a, Asp89b, Asp90c, Asp90d, BH81, Bri89, BH89b, CMR<sup>+</sup>83, FW88, GIS90, Haw88, How88, Mac92a, Mac92b, Mac99, Mau84, Smi10, Ste80a, Ste80b, SZ84, Tod80, Ula82, Von89, Wei88c, Wei89b, WT91a, WIR91]. **JOHNNIAC** [Gru79, Wil79]. **Johnson** [TBLJ90]. **Jointly** [Ano48]. **Jonathan** [TTB<sup>+</sup>88, Wei85b].

**José** [WCB90]. **Joseph** [BHW<sup>+</sup>90, WWCP92]. **JOSS** [BH81, Mar82]. **Journal**

[TDCKW84, Ano83-33, FW85, GGB85]. **Jr** [BSS84]. **Jule** [Phi81]. **July** [Ano85f]. **June** [ABE<sup>+</sup>83, Aue86a, GIS90].

**K.** [Buc80a, GL81, Hei91, WS86, WLC86].

**Kapera** [CWM<sup>+</sup>91]. **Kawasaki** [CB90].  
**Kelly** [Fla91, WLC86, CFK<sup>+</sup>91]. **Kemeny**

[Ano83-34, WS86]. **Ken** [CCKSS90, RH88, RH90]. **Kennedy** [Mer82]. **Kent** [Wei89b]. **Keuffel** [CB90, Otn89]. **Keyboards**

[CFK<sup>+</sup>91, Mar90]. **Khāwarizmi** [CH90].

**Khoresm** [Zem79]. **Khorezmi** [Zem79, CKSW83, SZ84]. **Khwarizmi**

[CFK<sup>+</sup>91]. **Kidder** [Dor82]. **Killen** [CMF<sup>+</sup>90]. **King** [AWB<sup>+</sup>88]. **knew** [Lea05].

**Know**

[CCR<sup>+</sup>91, Ham80, Lub91, Vin90, Vin93].

**Knuth** [CFK<sup>+</sup>91, AS82]. **Knutsen** [Hei91].

**kompanii** [PW86]. **Konrad**

[Buc80a, Bau00, Cer80, Cer81, Cza79, Pet00, Roj00, Spe00]. **Kozaczuk**

[WTE<sup>+</sup>85, AWL<sup>+</sup>88]. **Kruh**

[CFK<sup>+</sup>91, SE86, CCKSS90]. **Kuhn** [CW91].

**Kunstliche** [CWM<sup>+</sup>91]. **Kurt** [Buc83].

**Kurtz** [O'N92, WS86]. **kuüstliche** [Bül88].

**L** [Buc83, GMT85, HG79, Mer82, SWT<sup>+</sup>81, SR82, SE86, Wei89a, WT91a, WS86]. **L.**

[Ano83-31, Tro83a]. **Laboratories**

[Alt82, And82, Ano82a, Ber87, Cur89a, Cur89c, Mac91, Ran82d, Ryc83].

**Laboratory** [Ano48, Ano83l, AWL<sup>+</sup>88, Pai90, CK81, CK87, Chu80, Kis83, Noh84, Voo83a, Wil80b, WH84, WD85]. **labours** [BH88]. **Labs** [WTE<sup>+</sup>85, Ber84]. **Lady** [SHH81, HH80]. **Lake** [Til83]. **Lambda**

[Ros84c]. **Lambda-Calculus** [Ros84c].

**LaMotte** [Ano83-31]. **Language**

[Sak84, Sam91d, SN86, Wei80, KK85].

**Languages**

[Ano85f, CB90, Gre81, KT80b, O'N92, SH79, Wex93, dBvV81a, Nij88, Wex81, dBvV81b, Ano85f, dBvV81a, SWT<sup>+</sup>81, SR82, Tro82a].

**LaPrairie** [CKSW83]. **laptop** [Sco94].

**Large** [Ano48, AWL<sup>+</sup>88, Ata82, Ben83, Cur89b, Har47b, Har51, Har85a, Kis91, MHS82, vN81b, vN88]. **Large-Scale**

[Ano48, AWL<sup>+</sup>88, Har47b, Har51, Har85a, MHS82, vN81b, vN88]. **Late**

[TPG<sup>+</sup>89, BH88]. **Later** [Zem90a].

**Lavington** [GL81]. **Law** [THWV88].

**Lawrence** [WD85, Kis83]. **leading** [Pug84].

**Learning** [CCKSS90, Hawxx, Tra66].

**Lebenswerk** [WLC86, Zus70, Zus84].

**lecciones** [PW84a]. **Lecture**

[CK82b, TA81, WG82, Har47a, TWA<sup>+</sup>87].

**lectures**

[CKW85, Ers80, KT80a, PAD82, WLC86]. **Ledger** [TDCKW84]. **Lee** [Bur81, SWT+81, WWCP92, CCKSS90]. **Legacy** [GIS90, Ste85a, AFB+89, ZT86]. **legal** [Bur03]. **legitimate** [Moo77]. **Leslie** [TTG82]. **Lessons** [AFB+89, Dor87a, PW82, PW84b, PWA92]. **Letter** [Ano83-31, Hur83c, LH86, Str65, TWA+87, Van83, Knu84, Ano82d]. **Letters** [ATF+88, GCL83, Led83a, Led83b, Led83c, Led83d]. **Levy** [WTE+85]. **Lewis** [Wei89a]. **li.vi.5** [CFK+91]. **Libraries** [O'N92]. **Library** [Blu83, CFK+91, CH90, Wil81b]. **Licklider** [CW91]. **Life** [AFB+89, BHW+90, CW91, Cop04, Sim91, TSD+87, Wat90, ZT86, Zus93, BH88, Eis89, Gro91b, Mac83, Ste85a, WP00, CCKSS90, CDW92, CWM+91]. **Lilley** [CMF+90]. **Limits** [CCKSS90, WSC+88, Cer89]. **LINC** [RS82]. **Lindgren** [WS86, AFB+89, CW91]. **Linear** [Ata82, BRS+89, BHW+90, Dor84]. **Linkages** [Svo80]. **Linsman** [WTZ90]. **List** [O'N92]. **Literature** [ARE+87, ASS87, AMW+88, AWL+88]. **Livermore** [Kis83, WD85, Hug84, Mac91]. **lives** [Asi72, Asi82]. **living** [Asi64]. **LL.D** [Fut07]. **Load** [Dav84]. **Load-and-Go** [Dav84]. **Loader** [Joh83]. **Locke** [Bro81]. **Lockheed** [Ama83]. **Logarithmic** [GG90]. **Logarithms** [CK88]. **Logic** [Ano81i, Cop04, Asp80, Ano82g]. **Logical** [Asc83, BGvN82, Tra66]. **Logical-Numerical** [Asc83]. **London** [Boo80, RS80a]. **Look** [Zem90a, Zem90b]. **Looking** [ARE+87, Wil85e]. **looks** [Cer00]. **Louis** [Ram89, WTZ90]. **Lovelace** [HH80, HG79, Moo77, SHH81]. **Lucas** [KTW84, Wil83]. **luchshikh** [PW86]. **Ludgate** [Ran82k]. **Lugano** [Kin87]. **Lukoff** [BCKS+83, Ton80]. **Lundstrom** [CLBdB89].

**M** [Ano80c, AWL+88, BCKS+83, CW84, Eva83c, GL81, HG79, O'N91, PAD82, SBET85, WLC86]. **M** [Buc80b, SS80, TDCKW84, WLC86]. **M.D** [Fut07]. **MacDonald** [Wei88a]. **MacHale** [TSD+87]. **Machine** [Aik82, Alt82, AWL+88, AWB+88, AFB+89, Ata82, Aus81, Bus82, Cou82b, DK85, Gor86, Haw88, Kes80, Kid81, Kid90a, Kid97, Kin87, LS83, MK89b, Ree85, SE86, THWV88, Tor82a, WTE+85, Cra92, Fut07, FKK08, Fut59, Her88, Her95, Koz84a, Koz84b, PS91, BCKS+83, BHB+89, CDW92, Dor82, Fut73, Fut76, Lud82, Mer82, Pet08]. **Machinery** [AWB+88, CW91, Cha80, Har85a, Nor90, Sti82a, Ano48, AWL+88, Har47b, Har51, Tro87]. **Machines** [Ano79a, Ano80c, Ano88b, AWL+88, Bur81, CFK+91, Cou82a, Gra73, Har49, Hei91, Kid90b, KT80a, Mau82a, McC79, Sch82, WTE+85, de 84, vN81b, vN88, AF85, Har47a, Har50, Har53, Har84, MKW92, OLCJ91, Roj00, AWL+88, Buc80b, Obl80a, RWSW85, WTE+85]. **Macintosh** [CB90, Kaw90]. **MacWilliams** [WCB90]. **MAD** [TTG82]. **MADDIDA** [TWA+87]. **Made** [MK90c]. **Madrid** [KTW84, San82, Tom88]. **Maestro** [CFK+91, Mar90]. **Magnetic** [HK86, Tri86]. **mainframes** [Shu96]. **Maintenance** [Cha83]. **Major** [CCR+91, Rei91, Cor90]. **Making** [ARE+87, CMF+90, Coo83, Kil88, McM84]. **Man** [CFK+91, AF85, Lea05, Smi10]. **Management** [Bei75, Mac87, Ben91, CWM+91, Yat89, CMF+90]. **Managing** [CW91, Pen89, Pen90]. **Manchester** [Ano80c, BMC81, Bur00, CK80b, Lav80a, Nap00]. **Mancke** [CW84]. **MANIAC** [Ano79d, Met80]. **Manned** [Tom85b]. **Manual** [Ano83i, Ano83n, Ano83-27, Ano86o, AWL+88, Har46, Har85b, Ano83-36]. **manufacturing** [Pet00]. **Many** [CFK+91, Mar90]. **Marcel** [WTZ90]. **Marian** [BEG+87]. **Mark** [Ano80c, BMC81, Nap00, Wei91d, CK80b]. **Market** [AFB+89, Dor87a, Phi89].



**Marketing** [AdB86, BGR88, Smi83].  
**Marks** [WT91b, WT91c]. **Marling** [CFK<sup>+</sup>91]. **Martin** [Fla91]. **Maryland** [Blu87]. **Masani** [Ano88d, AWL<sup>+</sup>88].  
**Maschine** [Bül88, CWM<sup>+</sup>91].  
**Massachusetts** [Wex93]. **Master** [Ben91, CWM<sup>+</sup>91]. **Masthead** [Mil85].  
**Material** [Ste80c]. **Math** [BRS<sup>+</sup>89].  
**Mathematical** [AA85a, Ano88b, AWL<sup>+</sup>88, Bab82a, GMT85, HG79, McC83a, McP42, Obl80a, OH84, Sha45, Sha48a, Sha48b, WTE<sup>+</sup>85, WMS<sup>+</sup>89, dBvV81b, vdPWB82, AAR90, Asp80, Dub78, Har47a, Har84].  
**Mathematicians** [Ano81e, RWSW85, Rej81, Rei81].  
**Mathematics** [Cur89a, Cur89c, Tuk58, Ula80, Zem79, CL05]. **Mathematik** [ARE<sup>+</sup>87, Ric85]. **mation** [Bei75]. **Matter** [Ros84a]. **Matyas** [BCKS<sup>+</sup>83]. **Mauchly** [Ano82d, Mau84, SW80, Ste80b, Ste81].  
**maverick** [Wor87, AWL<sup>+</sup>88]. **May** [GIS90, Hur83c, MN88a, TLR<sup>+</sup>91, Ano83-31, Ano85f, Van83]. **MC** [Tro82b, dBdvdR71].  
**MC-25** [Tro82b, dBdvdR71]. **McCorduck** [KT80a, TDCKW84]. **McKie** [CW84].  
**McLean** [AWL<sup>+</sup>88]. **McMahon** [ARE<sup>+</sup>87].  
**McNeil** [CFK<sup>+</sup>91]. **MDDPM** [Gor86].  
**means** [Mer82]. **Mechanical** [ARE<sup>+</sup>87, Cha80, MRFS87, Svo80, dO86].  
**Mechanics** [Cou82b, Med88, Zus82b].  
**Mechanization** [Bei75, SS80]. **Medal** [Ano83-35]. **Media** [Win98, Win86a, Win86b, TSD<sup>+</sup>87].  
**Medical** [Blu87, BD90, CCR<sup>+</sup>91, Smi91].  
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- Ms** [CFK<sup>+</sup>91, CH90]. **Much** [Mac92b, Lea05, Mac92a, Mac99]. **Muddled** [Led82b, TDCKW84]. **Muller** [AFB<sup>+</sup>89, CW91, Lin87, Lin90]. **multimedia** [Sco94]. **multiprocessor** [Phi89]. **multiprogrammed** [Phi89]. **Munich** [WSC<sup>+</sup>88, MZ88]. **Murderer** [Hul41, CKSW83]. **Murphy** [THWV88]. **Murray** [O'N92]. **Musée** [All91]. **Museum** [All91, Ano82g, Ano83-34, MZ88, RS80a, WLC86, WSC<sup>+</sup>88, OLCJ91, Ano81j, Ano81k, Bur81, CK82b, Cer80, MHW87, OLCJ91, WR81, WTE<sup>+</sup>85]. **Museums** [All91, WSC<sup>+</sup>88, Wil89, Wil90]. **My** [CW91, CDW92, Eis89, Sim91, TPG<sup>+</sup>89, Wat90, Zus93, WP00]. **mysteries** [Fut07]. **Mysterious** [Hus85, Ran83].
- N** [SWT<sup>+</sup>81, WS86]. **N.** [LTC<sup>+</sup>81, LB81, RWSW85, SR82, VBCC83]. **Napier** [CWM<sup>+</sup>91, Haw88, Nag80, Wil83]. **NAS** [Ano83-35]. **NASA** [CWM<sup>+</sup>91, Tom85b, Tom87]. **Nash** [AW89]. **National** [Ano83l, Blu87, Chu80, Mac91, WD85, WSC<sup>+</sup>88, All91, MR85a, All91, AG89, CK81, CK87, Cur89a, Cur89c, Hus80a, Hus80b, Wil80b]. **NATO** [TPG<sup>+</sup>89]. **Naval** [Ano83a, Ree82]. **Navy** [Ano48, Til83]. **NCC** [AW82, Smi84, Wal80, Ano82f, Ano82g, Buc83, TA81]. **NCC'80** [MB80]. **Near** [Str85]. **Nearly** [Bem86]. **Neil** [Wei88a]. **Nest** [Ver90]. **Netherlands** [vdE92]. **Neumann** [CLBdB89, CFK<sup>+</sup>91, CW91, GIS90, NHN89, Asp80, Asp89a, Asp89b, Asp90c, Asp90d, Bri89, BH89b, Cer00, GIS90, Hep90, How88, Mac92a, Mac92b, Mac99, McC83d, SW80, Ste80a, TWA<sup>+</sup>87, Ula80, Ula82, Von89]. **Neutron** [RvN85, RUvN47]. **News** [Ano79c, Ano79d, Ano80e, Ano81i, Ano81j, Ano81k, Ano82e, Ano82f, Ano82g, Ano83-33, Ano83-34, Ano83-35, Ano84i, Ano84j, Ano84k, Ano84l, Ano85j, Ano85k, Ano85l, Buc83, Bur81, CK82b, Cer80, RS80a]. **Niels** [Aue84]. **Night** [TD88]. **Nijholt** [CB90]. **No** [BRG<sup>+</sup>87, BDA91, Rob87]. **Nominations** [Ano83-33, BWK88]. **Nomography** [Eve86]. **Nonprogrammer** [Mar82]. **Norberg** [CW91]. **Norbert** [Ano88d, AWL<sup>+</sup>88, MM97, Mas90]. **NORC** [vN81a]. **Norden** [CCKSS90, Sea89]. **Norris** [AWL<sup>+</sup>88, Wor87]. **North** [Str83, Tro83b]. **Northrop** [AMTC80]. **Notation** [BCKS<sup>+</sup>83, BRG<sup>+</sup>87, BEG<sup>+</sup>87, Fra81]. **Note** [Ano83c, Ano83q, Ano83p, Ano83o, Ano83r, Ano83s, Ano83t, Ano83u, Ano83v, Ano83w, Ano83x, Ano83y, Ano83d, Ano83a, Ano83b, Ano86a, Ano86h, Ano86f, Ano86g, Ano86p, CCR<sup>+</sup>91, Cer91a, Fin84, GGB85, Hur85, RBZ82, CK85]. **Notebooks** [Wil81a]. **notes** [Coh88, BHW<sup>+</sup>90, vdPWB82]. **Nothing** [Cer00]. **Notices** [Ano79c, Ano79d, Ano81i, Ano81j, Ano81k, Ano82e, Ano82f, Ano82g, Ano83-33, Ano83-34, Ano83-35, Ano84i, Ano84j, Ano84k, Ano84l, Ano85m, Ano85j, Ano85k, Ano85l, Ano86l, Ano86m, Ano86n, Buc83, Bur81, CK82b, Cer80, Dor87b, RS80a]. **Novelty** [Kid90b]. **November** [Ano82d, Blu87, MM97]. **NSA** [McC83f]. **Nuclear** [Mac92b, Mac92a, Mac99]. **Number** [BGH<sup>+</sup>91, Wei85a, Sma46]. **Numeric** [MN88a]. **Numerical** [Ano81e, Asc83, AG89, GG82, LS83, SWT<sup>+</sup>81, Sma46, Gol77]. **Numerik** [ARE<sup>+</sup>87, Ric85]. **Nutt** [WCB90].
- O** [Buc83, O'N92, GM85]. **O.** [BCKS<sup>+</sup>83, SBET85]. **Oak** [Hou80]. **Obituaries** [Buc83, Wei89b, WCB90, WIR91, Wei91b]. **Obituary** [WK89, Wei91c]. **Obra** [LTC<sup>+</sup>81, San80]. **observation** [Fut07]. **Observations** [Har81]. **Observatory** [THWV88]. **Observed** [WH84]. **occasion** [TLR<sup>+</sup>91, dBvV81b]. **October** [AFI72, Aue86a, Hur83c, Ano85i, Cli85]. **Office** [Ree82, SS80]. **Office** [Bei75]. **Oh**

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- R** [Ano82d, BCKS<sup>+</sup>83, CW84, CMR<sup>+</sup>83, Hei91, Ran81, RWSW85, WTE<sup>+</sup>85, WT91a, WIR91, WLC86]. **R**. [BSS84, BCKS<sup>+</sup>83, CKSW83, RWSW85, SWT<sup>+</sup>81, SR82]. **Rabdology** [Nap90, CWM<sup>+</sup>91]. **Radar** [Har83]. **Radio** [BCKS<sup>+</sup>83, Sto82]. **Rajchman** [Wei89b, WTZ90]. **Ralston** [BSS84]. **Rand** [Arm83]. **Randell** [Zus80a]. **Range** [Ano85i, SC85]. **Rate** [Ano83e, Ano83f]. **rational** [Tra66]. **RCA** [Raj80]. **reaction** [Rei81]. **Read** [AWL<sup>+</sup>88, WTE<sup>+</sup>85, Koz84a, Koz84b, Zem79]. **Reading** [Wil81a]. **Real** [FL86, WMS<sup>+</sup>89]. **Real-Time** [FL86]. **Realities** [WSC<sup>+</sup>88]. **Rebuilding** [Bur00]. **Receive** [Bur81]. **Receives** [Ano80e, O<sup>+</sup>N91]. **reception** [Rei81]. **Rechenmaschinen** [Gra73, MKW92]. **Reckoners** [Cer83, TDCKW84]. **recognition** [BMK90]. **Recollections** [Amd83, Aue86b, Gor86, Gre83, Had83, Hem86, Hun83, Kes80, Luk83, PCJ85, Rec86, SC85, Svo80, Tro80, FL86]. **Reconsidered** [Bri89]. **Reconstruction** [Gus00, VTAA00]. **Reconstructions** [Sei00]. **Record** [TD90, Ano83z]. **Recording** [RA86]. **Recordings** [Ano79d]. **records** [All91, WSC<sup>+</sup>88]. **Recursive** [Kle81].
- Recursiveness** [BCKS<sup>+</sup>83, Fra81]. **Redmond** [GL81]. **Reed** [TWA<sup>+</sup>87]. **Rees** [Ano83-35]. **Referees** [Ano80f, Ano80g, Ano81l, Ano82h, Ano86q]. **Reflections** [AAA<sup>+</sup>86, ARE<sup>+</sup>87, MM88, Wel80, Wil81a]. **Reform** [CSW90, BH89a, Hym88]. **Refugee** [RWSW85, Rei81]. **Region** [Zem79]. **Register** [Gol84]. **Regrettor** [BSEW83, Wei85a]. **Regulation** [CMF<sup>+</sup>90, CF89]. **Reid** [CLBdB89]. **Reilly** [BSS84]. **reinen** [ARE<sup>+</sup>87, Ric85]. **Reingold** [RWSW85]. **Rejewski** [BEG<sup>+</sup>87]. **Related** [Ste80c, TWA<sup>+</sup>87]. **Relating** [WSC<sup>+</sup>88]. **Relations** [Smi83]. **Relationship** [Sch85]. **Relay** [AB82, Ces82, Spe80]. **Relays** [TDCKW84, Cer83]. **Reliability** [For83]. **Remarks** [Ano82d, McC83c, Zus80c, Wil00]. **Remembrances** [Sha89, TPG<sup>+</sup>89]. **Reminiscences** [Cun85b, Hou80, Jon85, TTB<sup>+</sup>88, Wal79, BFB82]. **Remote** [LP81]. **Replies** [ABE<sup>+</sup>81]. **Reply** [BGH<sup>+</sup>91, BB82, Lee91f]. **Report** [ABE<sup>+</sup>83, AWL<sup>+</sup>88, Eva83b, HEA<sup>+</sup>83, McC83d, Mer82, RMV82, TBGE89, WG82, vN82, TWCD86, SW80]. **Reprint** [CK82b, GMT85]. **Reprinted** [Ano79c]. **Republic** [Mai88]. **Request** [Bur81]. **Research** [Ano82a, GIS90, Gre91, Raj80, Ryc83, Tom80, TG91, TDCKW84, WMH82, BH89d, Ano82g, Obl80a, Ree82]. **Response** [BEG<sup>+</sup>87, CS85, FW85, Spr80, TS85, BHW<sup>+</sup>90]. **retirement** [dBvV81b].
- Retrospect** [AW82, BBC<sup>+</sup>87, LP81, MB80, Noh84, RS82, SZ84, TA81, Tro85, Wal80, Wal81, WR81, War86, WG82, Wil82, WH84, Wil85c, WD85]. **Retrospective** [BW84, Eva86, TPG<sup>+</sup>89]. **Review** [All84, Ano88d, CK84, Cer91a, Col91, Fla91, FW85, GGB85, Lub91, Mor86, RA86, Rei91, Smi91, BRS<sup>+</sup>89, GMT85, CCR<sup>+</sup>91]. **Reviews** [ARE<sup>+</sup>87, ASS87, AMW<sup>+</sup>88,

AWL<sup>+</sup>88, AWB<sup>+</sup>88, Asp88, AFB<sup>+</sup>89, ACK89, AW89, BSS84, BCKS<sup>+</sup>83, Buc80a, Buc80b, CKSW83, CSW90, CW84, CLBdB89, CCKSS90, CMF<sup>+</sup>90, CB90, CCR<sup>+</sup>91, CFK<sup>+</sup>91, CWM<sup>+</sup>91, CW91, CDW92, Dor82, GL81, GMT85, Ham79, HG79, KT80a, LTC<sup>+</sup>81, LB81, RWSW85, SWT<sup>+</sup>81, SR82, Smi84, SBET85, SE86, SS80, Tro82b, Tro82a, TDCKW84, TSD<sup>+</sup>87, VBCC83, WTE<sup>+</sup>85, WS86, WLC86, ZT86, Ano80c, Ano81e, Ano88b, Buc80b].

**Revisited** [Cun85a, Sej89, Bau00].

**Revolution** [AWB<sup>+</sup>88, For80, For81, Ben86, For87, Gar85, Gar87, Lev84, Lev85, Mol89, Pyl70, PB89, AWL<sup>+</sup>88, CCKSS90, Ham79, SR82].

**Revolutions** [Bur80]. **Reweaving** [CCKSS90, Sta85, Sta89]. **Richard** [Wei88b]. **Richenhagen** [ARE<sup>+</sup>87]. **Ridge** [Hou80]. **Rifkin** [CCKSS90]. **Rigas** [WTZ90]. **Rise** [CMF<sup>+</sup>90, WTE<sup>+</sup>85, OD84, Yat89]. **Rita** [Wei89a]. **River** [Hae86]. **Robert** [O<sup>+</sup>N92, WZ89]. **Robinson** [WTZ90]. **Robotics** [Ano83-33]. **Robotor** [Bül88, CWM<sup>+</sup>91]. **Robots** [AF85, CFK<sup>+</sup>91]. **Role** [Ber86, SW80]. **Rose** [CW91]. **Rosen** [CW91, Wei91b]. **Rosenberg** [RWSW85]. **Rosser** [CK82b]. **routine** [Wad00]. **Rowland** [AWL<sup>+</sup>88]. **Roy** [WCB90]. **Rules** [CMF<sup>+</sup>90, Otn89, CF89, CB90]. **run** [PW82, PW84b, PWA92]. **Runge** [ARE<sup>+</sup>87, Ric85]. **Russian** [Tra84]. **Rutishauser** [Bau80].

**S** [BCKS<sup>+</sup>83, BDA91, Fut07, TDCKW84, TWA<sup>+</sup>87, Wei88a, Wei89a]. **S.** [GL81, TDCKW84, WTE<sup>+</sup>85]. **S.S.R** [Zem79]. **Sad** [Ray89]. **saga** [MR85a, MR85b, AWL<sup>+</sup>88]. **SAGE** [AJ83, EZB83, Jac83, TBB<sup>+</sup>83, Tro83b, Val85]. **Sales** [Ano83w]. **Samuel** [WT91a, WWCP92]. **Santa** [Noh84, Bak83]. **Santesmases** [LTC<sup>+</sup>81, WCB90]. **SAP0** [Bla80]. **Saul** [Wei91b, WWCP92]. **Savannah** [Hae86]. **Scale** [Ano48, AWL<sup>+</sup>88, Har47b, Har51, Har85a, Kis91, MHS82, vN81b, vN88]. **Scene** [BEG<sup>+</sup>87]. **Scenes** [Bül90]. **Scheme** [Cou82b, Bre00]. **Scheutz** [THWV88, AFB<sup>+</sup>89, CW91, Lin87, Lin90, TBGE89]. **Scholarship** [O<sup>+</sup>N92]. **School** [Sam91a, Ste85b, WLC86, CKW85, MHW87, RB85]. **Science** [AWL<sup>+</sup>88, Asp89b, BH89a, BSS84, BSEW83, BCKS<sup>+</sup>83, BWK88, BHW<sup>+</sup>90, CSW90, Cer88, CMF<sup>+</sup>90, CMR<sup>+</sup>83, Hym88, LP81, Mai88, McC83a, RS80a, Sch85, WS86, WSC<sup>+</sup>88, Zem79, Asi64, Asi72, Asi82, Asp80, BMK90, Gar85, Gar87, Har81, LT89, OLCJ91, RM76, Ral76, RR92, RR83, RRH00, Tom87, WL85]. **Sciences** [MK90a]. **Scientific** [Ano79c, Asp85b, Asp89a, AW89, BHMU85, CCKSS90, GMT85, Hur85, Mac92b, MN88a, Nas90, Voo83a, Wil81b, Eck40, EM84, Mac92a, Mac99]. **Scientists** [Kid90b, May80, Asi64, Asi72, Asi82, Hal09, Hof90]. **sculpture** [OLCJ91]. **SDC** [Bau81]. **SEA** [Ray89, Sta90]. **SEAC** [Slu80]. **Search** [BCKS<sup>+</sup>83, Tra84, PW82, PW84b, PW85, PWA92]. **Searle** [CCKSS90]. **Second** [O<sup>+</sup>N92, SBET85, Har51, HT79, HH79, Hin93, Wex93]. **Secondary** [Asp87, Mac87]. **secret** [Fra84, Fra85, SBET85]. **Secrets** [Cop04, Cop06]. **secure** [MM82]. **Security** [dLB07, MM82]. **Seen** [Bir80, Roc83b]. **Segments** [Lee91g]. **Segundo** [Sch83]. **seinem** [Cza79]. **Selected** [CSW90, Ran82l, BH89a, Hym88]. **Selections** [DKK<sup>+</sup>98]. **Self** [Ano83g, Ano83h, Ano83-37, Ano83-38, Ano84m, Ano84n, Ano84o, Ano84p, Ano85n, Ano85o, Ano85p, Ano85q, Ano86r, Ano86s, Ano86t, Ano86u, Ano88f, CS85, Kes86, Lee91e, Lee91i, Sam87a, Sam87b, Sam87c, Sam88a, Sam88b, Sam88c, Sam88d, Sam89a, Sam89b, Sam89c, Sam89d, Sam90a, Sam90b, Sam90c, Sam90d, Sam91c, Sam91b, TS85, Ano91a, Ano91b, Sam91a]. **Self-Study**

[Ano83g, Ano83h, Ano83-37, Ano83-38, Ano84m, Ano84n, Ano84o, Ano84p, Ano85n, Ano85o, Ano85p, Ano85q, Ano86r, Ano86s, Ano86t, Ano86u, Ano88f, CS85, Kes86, Lee91e, Lee91i, Sam87a, Sam87b, Sam87c, Sam88a, Sam88b, Sam88c, Sam88d, Sam89a, Sam89b, Sam89c, Sam89d, Sam90a, Sam90b, Sam90c, Sam90d, Sam91c, Sam91b, TS85, Ano91a, Ano91b, Sam91a]. **SEMA** [LA91]. **Semiconductor** [AFB<sup>+</sup>89, Dor87a]. **Seminal** [Cop04]. **Seminar** [Ano86c]. **Sept** [Zem79]. **September** [Ano82d]. **Sequence** [AH82, AWL<sup>+</sup>88, Har46, Har85b]. **Series** [CK82b]. **servant** [Ben91, CWM<sup>+</sup>91]. **service** [BW91]. **Session** [TA81, Wil82]. **Set** [WLC86]. **Seven** [Ano80c, Mar80]. **several** [Fut07]. **Shannon** [TWA<sup>+</sup>87]. **Shaped** [WTE<sup>+</sup>85, Pug84]. **SHARE** [Noh84, vdPWB82, Arm80, MB80]. **Shockley** [Wei89b]. **SHORT** [Sch88, Gru80b]. **SHOT** [O'N92]. **Should** [Asp85a, SE86]. **Showed** [CW91, Hep90]. **Shurkin** [BSS84]. **Sidelights** [CCKSS90, Kru89]. **Sidney** [WIR91]. **Sieve** [Leh80]. **SIGPLAN** [O'N92, Wex93]. **Silicon** [AWB<sup>+</sup>88, Sla87, AWB<sup>+</sup>88, Cad86]. **Simon** [CDW92]. **Simple** [SBET85, Tho79, Tho83]. **Simplifié** [ARE<sup>+</sup>87, dO86]. **Simplifying** [ARE<sup>+</sup>87, dO86]. **Simulator** [Hol82b, CK00]. **simulators** [Oko00]. **Simultaneous** [Hun86]. **since** [Cer00]. **Sine** [BRG<sup>+</sup>87, Rob87]. **single** [SS10]. **single-processor** [SS10]. **Site** [Cer80]. **Six** [BCKS<sup>+</sup>83, Wel82]. **Slater** [AWB<sup>+</sup>88]. **Slave** [CFK<sup>+</sup>91, FG90]. **slices** [CWM<sup>+</sup>91, Gro91b]. **Slide** [CB90, Otn89, WLC86]. **Small** [WMS<sup>+</sup>89]. **Smith** [GL81, AW89]. **Smithsonian** [WSC<sup>+</sup>88, All91, BRG<sup>+</sup>87, O'N92, Tro80]. **Snippets** [WCB90]. **SOAP** [BH81]. **Sobel** [TSD<sup>+</sup>87]. **Social** [BHP87, CLBdB89, CCKSS90, Mol89, Per87]. **Societies** [Ano86b]. **Society** [For87, Hof90, O'N92, Ben86, For81, Win98, Ano82e, AWB<sup>+</sup>88, CCKSS90, O'N92]. **Sociological** [AMW<sup>+</sup>88, Blo87]. **Sociology** [BHP87, CCKSS90]. **Software** [Asp87, Cus91, TPG<sup>+</sup>89, TKE90, Mor84, Oko00]. **Solid** [Ano82g]. **Solid-State** [Ano82g]. **Solla** [RWSW85]. **Solution** [Ata82, Hun86, LS83, MRFS87]. **Some** [Bac80, CCKSS90, Dou79, Gor86, Kru89, MM88, McC91, Sam91d, Tak80, Tro80, WCB90, Zus80c, Wil85e, Wil00]. **Son** [CFK<sup>+</sup>91, Wat90, WP00]. **Sought** [BSEW83, BWK88]. **Soul** [Dor82, Kid81, Kid90a, Kid97]. **Source** [Ste80c]. **Sources** [Ano81k, Asp87]. **Southern** [Gru80b]. **Soviet** [BC90]. **Soviets** [TB84]. **Space** [WSC<sup>+</sup>88, Asi64]. **Spacecraft** [Tom85b]. **spaceflight** [CWM<sup>+</sup>91, Sco94, Tom87]. **Spake** [CFK<sup>+</sup>91, CH90]. **Spanning** [GH85]. **Speaks** [Bur81, WR81]. **Special** [Gal87a, Hur83a, Hur86a, Lee85, O'N92, Gal86c]. **species** [Sma46]. **Specifications** [MK90c]. **Spectrum** [CCKSS90, IEE89]. **Speeches** [OW83]. **Speed** [Mau82b, vN81a]. **Speedcoding** [Ano83-27]. **Sperry** [CCKSS90, Sea89]. **Sphere** [SBET85, Tho79, Tho83]. **spinoff** [Sco94]. **Sponsored** [Ano48]. **SPREAD** [ABE<sup>+</sup>83, Eva83b, HEA<sup>+</sup>83, HOAS84]. **Sr.** [TWPP91]. **SSEC** [Bas82, Hug86, MHS82, RBZ82]. **stages** [Jon89]. **stamp** [OLCJ91]. **Stan** [ZT86]. **Stand** [BHW<sup>+</sup>90]. **Standard** [Slu80]. **Standardization** [Gre84]. **Standards** [Hus80a, Hus80b, AG89, Cur89c]. **Start** [Aue86b, Tom80, TBLJ90]. **State** [Ano82g, AWB<sup>+</sup>88, Bau90, MM97, PAD82, Kin87]. **Statement** [Ano81f, Fut07]. **States** [RWSW85, Rei81]. **Statistical** [RvN85, RUvN47]. **Staudenmaier** [CCKSS90]. **Stein** [ZT86, AFB<sup>+</sup>89]. **step** [Tra66]. **Stern** [VBCC83]. **Stibitz** [LP81]. **Still** [GGB85]. **Stirring** [WMS<sup>+</sup>89]. **stock**

- [Phi89]. **Stokes** [BCKS<sup>+</sup>83]. **Storage** [Bau90, Mac87, Sak84]. **Stored** [AW82, Asp90a, BP84, Bur80, CW91, Ran82m, RS82, TDCKW84, Cer83, Tra66]. **Stored-Program** [AW82, BP84, Bur80, RS82]. **stories** [Asi64, Fut73, BH81]. **Story** [BRS<sup>+</sup>89, BHW<sup>+</sup>90, CCKSS90, Fan88, Gre91, TG91, Bau81, BB88, For87, Lav80b, Lav80c, RH88, RH90, Wel82, AMW<sup>+</sup>88, BCKS<sup>+</sup>83, CB90]. **Storytellers** [CCKSS90, Sta85, Sta89]. **Strategy** [CK85, Cer80]. **strategy** [HT79, HH79]. **Stretch** [Buc62]. **Structure** [AFB<sup>+</sup>89, Dor87a]. **Structured** [TKE90]. **structures** [Mah00]. **Struggle** [TSD<sup>+</sup>87, Sob86]. **Student** [Sha89, TPG<sup>+</sup>89]. **Studies** [CCR<sup>+</sup>91, Lub91, LP81, Vin90, Vin93, BHB<sup>+</sup>89]. **Study** [Ano83g, Ano83h, Ano83-37, Ano83-38, Ano84m, Ano84n, Ano84o, Ano84p, Ano85n, Ano85o, Ano85p, Ano85q, Ano86r, Ano86s, Ano86t, Ano86u, Ano88f, Asp89a, Asp00, BHW<sup>+</sup>90, CS85, Kes86, Lee91e, Lee91i, O'N92, Sam87a, Sam87b, Sam87c, Sam88a, Sam88b, Sam88c, Sam88d, Sam89a, Sam89b, Sam89c, Sam89d, Sam90a, Sam90b, Sam90c, Sam90d, Sam91c, Sam91b, Ste79, TS85, Ano91a, Ano91b, Sam91a, Ste80d, Wil91b, Big80]. **Subcommittee** [CCKSS90]. **Subject** [Ano88h, Ran82h]. **Subordinate** [McC83e]. **succeeded** [Gla91]. **Success** [AWB<sup>+</sup>88, Wal81, Cad86]. **Successors** [Ros84b]. **Suggestions** [Ano82i, Ano83-39, Ano84q, Ano85r, Ano86v]. **Suitable** [Cou82b]. **Sumador** [RL81]. **Summary** [Ano85f, Sam85, SG85, Sma46]. **Summer** [Bur81, GIS90]. **Summit** [CFK<sup>+</sup>91]. **Sumptuous** [OLCJ91]. **Sun** [CW91, HB90]. **Sunburst** [CW91, HB90]. **Supercomputer** [CCKSS90, Hor82, SS10]. **Supercomputing** [Mac91]. **superscritcher** [Cra92]. **Supplement** [Tom87]. **Supplementary** [Ran80b]. **Supply** [Ano83a]. **Support** [AWB<sup>+</sup>88, Fla87].
- Survey** [Ano81k, Asp85b, Tra84, WT91b, WT91c, Her88, Her95, Wil85e, AFB<sup>+</sup>89]. **Survive** [Ros84b]. **Svoboda** [Obl80b]. **SWAC** [Hus80a, Hus80b]. **Swift** [TTB<sup>+</sup>88, Wei85b]. **Switching** [And82]. **Switzerland** [Kin87, Sch81]. **Symposia** [Gru80a]. **Symposium** [AWL<sup>+</sup>88, dBvV81a, BH89b, CK82b, Har51, Zem79, dBdvdR71, dBvV81b, Ano48, Har47b, Har85a, MN88b, Tro82b]. **System** [Ano83n, Ard86, Asc83, CMF<sup>+</sup>90, EZB83, Hol82a, LK87, Oli87, Swe83, VBCC83, Wie83, Bau81, Buc62, Jon89, Sal00, Yat89, Ano83-27, Eva86, Pug84]. **System/360** [Eva86, Pug84]. **Systems** [Ano85f, Ata82, BHP87, CCKSS90, Dav84, MM88, OH84, WMH82, WK89, MM82, Sco94].
- T** [GL81, WG82, WS86]. **T.** [BCKS<sup>+</sup>83, Dor82, SR82, SBET85]. **Table** [CK88]. **Tables** [Ano88i, BRG<sup>+</sup>87, GG90, Rob87, WMS<sup>+</sup>89, Mer82, Sma46]. **Tabulating** [Hol82a, Kes80, RA86]. **tabulator** [Kis00]. **Takahasi** [SS80]. **Tale** [Str85, Fra84, Fra85]. **Tales** [CCKSS90, CW91, Kru89, Jen90]. **Tanaka** [Ano83-34]. **Tape** [Gre91, TG91]. **Tapes** [Ano81j]. **Tapestry** [Gre91, TG91]. **Targeting** [AWB<sup>+</sup>88, Fla87]. **Tarski** [RB85, Add84]. **Task** [HEA<sup>+</sup>83]. **Taylor** [CW91]. **Teaching** [Tuk58]. **Tech** [CCKSS90, For87, CW91, Pen89, Pen90, Sei00]. **Technical** [CFK<sup>+</sup>91, Fla91, Mas83, Sch82, CK89, OLCJ91, Ano83x, Gre83]. **Techniques** [Nut84, Voo83b, CKW85, All91]. **Technological** [All84, AWB<sup>+</sup>88, BHP87, CCKSS90, CMF<sup>+</sup>90, OLCJ91, Ben86, CF89]. **technologie** [MK90b, CW91]. **Technologies** [Gre91, TG91]. **Technology** [Asp86, AdB86, AWL<sup>+</sup>88, BHP87, CW84, Cer88, CCKSS90, CCR<sup>+</sup>91, CW91, Col91, DKK<sup>+</sup>98, LP81, Mah88, McN90, McN96, Nor90, Sta85, Sta89, Ste79, Van89, Van91a,



Van91b, dB86, Asi64, Asi72, Asi82, Asp00, BH89d, Fla88, For81, For87, OLCJ91, PB87, Ste80d, Tom87, Wil85d, Wil97, Win98, ACK89, BCKS<sup>+</sup>83, CCKSS90, CFK<sup>+</sup>91, TSD<sup>+</sup>87]. **Tektronix** [CCKSS90, Lee86]. **telegraph** [Win98]. **Telephone** [Alt82, And82, Ran82d]. **Television** [CDW92]. **Teller** [BH89c]. **Ten** [Ano88e, Ano88f, Ano88g, Ano88h, Ano88i, Asp88]. **Teresa** [Noh84]. **Term** [Asp85a, SE86, TTB<sup>+</sup>88, TB84]. **Terman** [Buc83]. **Terms** [TBGE89]. **Testimony** [Hur81]. **Testing** [Ano83p]. **Texas** [TLR<sup>+</sup>91]. **text** [CFK<sup>+</sup>91, CH90]. **Their** [Ano88b, AWL<sup>+</sup>88, Cou82a, WTE<sup>+</sup>85, Har47a, Har84, MKW92, Oko00]. **them** [Lav80b, Lav80c]. **Theoretical** [Tor82b, Har81]. **Theory** [CB90, CFK<sup>+</sup>91, Kle81, Mac92b, Sha45, Sha48a, Sha48b, CKW85, Mac92a, Mac99, Nij88, Tra66, Asp90d]. **things** [Wil00]. **think** [McC79, KT80a]. **Thinker** [GG92]. **Thinking** [BCKS<sup>+</sup>83, Fut07, FKK08, Fut59, Fut73, Fut76]. **Third** [Kin87]. **Thirty** [Mai88, Mil85, BL82]. **Thomas** [CFK<sup>+</sup>91, O'N92, FG90, TWPP91]. **Thompson** [SBET85]. **those** [Ver90]. **Thought** [Ham80, BWC83a, BWC83b, RWSW85]. **Thoughts** [AMTC80, TPG<sup>+</sup>89, Wil85e]. **Thousand** [Per86]. **thread** [BBS86, ASS87]. **Three** [Ber84, Ber87, Bül90, GCL83, WTE<sup>+</sup>85]. **Thus** [CFK<sup>+</sup>91, CH90]. **Tidal** [vdE92]. **Time** [FL86, WMS<sup>+</sup>89, CCKSS90]. **Time-Life** [CCKSS90]. **Timers** [BMC81]. **times** [Asi72, Asi82]. **Today** [AWB<sup>+</sup>88, Kin87]. **together** [Wil85e]. **Tokyo** [AFI72]. **Tomash** [OLCJ91, Ano81i]. **Tomayko** [CWM<sup>+</sup>91]. **Tomorrow** [ARE<sup>+</sup>87, Wil85e]. **too** [Lea05]. **Tools** [CB90, Dru82, Fan88]. **Topics** [TWA<sup>+</sup>87]. **Toronto** [LP81]. **Torres** [LTC<sup>+</sup>81, San80, Ran82k]. **tour** [Pet08]. **Tracing** [McC83e]. **Tragedies** [McC01]. **Training** [Hol82b, Sco94]. **Transatlantic** [Wil87]. **transfert** [CW91, MK90b]. **Transforms** [TWA<sup>+</sup>87]. **Transistor** [Tak86]. **Transistors** [Cha91c, CWM<sup>+</sup>91]. **Transition** [Bau90]. **Translated** [Zem90b]. **Translation** [AWB<sup>+</sup>88, CFK<sup>+</sup>91, CH90, Kin87]. **Transmission** [Har83]. **Tree** [GH85]. **Tribute** [TLR<sup>+</sup>91, dBvV81b]. **Trice** [CMF<sup>+</sup>90]. **Trigonometric** [GG90]. **Trilogy** [MW80, MW72]. **Trinity** [UV81]. **triumph** [MR85a]. **Triumphs** [McC01]. **Tropp** [Ano82d]. **Trounces** [TPWW92]. **true** [Fut07]. **TSS** [RGB83]. **Tube** [Mau82b]. **Tubes** [BCKS<sup>+</sup>83, Sto82]. **Turing** [AWL<sup>+</sup>88, CK84, CFK<sup>+</sup>91, O'N91, THWV88, TDCKW84, Asp80, Cop04, DK90, Her88, Her95, Hod83a, Hod83b, Hod85, Hod00, Lea05, MJ84, Pet08, TWCD86, Wil80b]. **Turkestan** [SZ84]. **Tutorial** [Kin87]. **Twelve** [MK90c]. **Twentieth** [BWC83c, LTC<sup>+</sup>81, LB81, SR82, MHR85, MHR80, WD85]. **Twentieth-century** [BWC83c]. **Twenty** [ARE<sup>+</sup>87, TPG<sup>+</sup>89, Wil85e]. **Twenty-five** [ARE<sup>+</sup>87, Wil85e]. **Two** [Bur80, Per86, Jon89, AWL<sup>+</sup>88, BWV<sup>+</sup>88, Koz84a, Koz84b, WTE<sup>+</sup>85]. **Type** [HK86, Hug86, LS83, Mau82a, Ano83y, Ano83-36]. **U.S** [CW84, CCR<sup>+</sup>91, RS80a, WSC<sup>+</sup>88]. **U.S.** [Ano83a, Ano83b, Cor90, FMM83, Rei91, Til83, TD88]. **U.S.-U.S.S.R** [RS80a]. **U.S.A.** [Bir80]. **U.S.S.R** [RS80a]. **Ultimate** [CCKSS90, RH88, RH90]. **Undergraduate** [Ano82e]. **Understanding** [CCKSS90, Tim89]. **Unfortunate** [CKSW83, Hul41]. **Unidos** [PW84a]. **Unisys** [All91]. **Unit** [Wil81a]. **United** [RWSW85, Ano83d, Rei81]. **UNIVAC** [VBCC83, Sch88, Ste80d, Ste81, TD88, TPWW92, CLBdB89, Lun87]. **Universal**

[AFB<sup>+</sup>89, Her88, Her95]. **Universities** [Gal86d, BMK90]. **University** [Ano48, Ano80c, BHB<sup>+</sup>89, CFK<sup>+</sup>91, CH90, GIS90, MM97, Ste85b, TLR<sup>+</sup>91, Ano81k, Boo80, CK80a, CK80b, Kun90, Lav80a, MK90a]. **UNIX** [TLR89, TBGE89]. **Unpublished** [Ano82d]. **Unusual** [CMR<sup>+</sup>83]. **uplink** [Sco94]. **upravleniia** [PW86]. **Urgench** [Zem79]. **USA** [AFI72, ACM00, Wex93]. **USA-Japan** [AFI72]. **Use** [AB82, Mau82b, Wil83, Wil85e]. **Used** [Voo83b]. **User** [Bri84, BDA91, TBB90]. **using** [CK82b]. **USSR** [ESB80]. **Uzbek** [Zem79].

**V** [PW86, SN86]. **Vacuum** [Mau82b]. **Valley** [AWB<sup>+</sup>88, Cad86]. **valves** [Sto82, BCKS<sup>+</sup>83]. **Velma** [WT91a]. **Victor** [PAD82, Zem82]. **video** [Sco94]. **Vienna** [Tro85]. **View** [Eva86, Kil88, CMF<sup>+</sup>90]. **Viewpoint** [Jon85]. **Vincent** [SZ84]. **Vincenti** [CCR<sup>+</sup>91, CCR<sup>+</sup>91, Cer91a, Lub91]. **Vindicated** [KTW84]. **vintage** [Lav80b, Lav80c]. **Visions** [WSC<sup>+</sup>88]. **Vivian** [WTZ90]. **VLSI** [VTAA00]. **Vol** [BDA91, CCKSS90, Tim89]. **Volume** [Ano82b, Ano83-29, Ano84g, Ano85g, Ano86i, Ano86j, Ano87b, Ano88c, Ano88g, Ano89d, Ano90, BGH<sup>+</sup>91]. **Volumes** [Ano81a, Ano81c, Ano81h, Ano84f]. **Vorträge** [Gra73]. **Vs** [Sea89, CCKSS90, Sob86, TSD<sup>+</sup>87].

**W** [Ano82d, BKM84, BCKS<sup>+</sup>83, CW84, Eva83d, Ham79, Mer82, O'N92, Ran81, TLR<sup>+</sup>91, Tro82b, Tro82a, WTE<sup>+</sup>85]. **W.** [GMT85, SE86, WTE<sup>+</sup>85]. **Walter** [BKM84]. **Walther** [dB86]. **War** [AWL<sup>+</sup>88, CCKSS90, Koz84a, Koz84b, Sea89, WTE<sup>+</sup>85, Van89, Van91a, Van91b, HT79, HH79, Hin93, SBET85]. **Ward** [Wei89b]. **Warwick** [Ano81k]. **Was** [AWL<sup>+</sup>88, BGR88, CFK<sup>+</sup>91, DK90, Hus85,

WTE<sup>+</sup>85, Koz84a, Koz84b]. **Washington** [WSC<sup>+</sup>88, Pet83, Wal79]. **Waterman** [BCKS<sup>+</sup>83]. **Watson** [TWPP91, CFK<sup>+</sup>91]. **Way** [Hep90, Kaw90, CB90, CW91]. **Weather** [Ano83b]. **Weg** [Cza79]. **WEIZAC** [Est91]. **Welchman** [BCKS<sup>+</sup>83]. **Welfare** [Ano83-35]. **Were** [Cer91b]. **Werner** [O'N92, Zem90b]. **West** [CW91, Ros89, MP83]. **Western** [Hus80a, Hus80b]. **Westinghouse** [Bri79]. **Westinghouse-Bettis** [Bri79]. **Wet** [Tro82a]. **Wexelblat** [SWT<sup>+</sup>81, SR82]. **Whence** [Ano84d, TTB<sup>+</sup>88]. **which** [Fut07]. **Whiggism** [BHW<sup>+</sup>90]. **Whirlwind** [BHW<sup>+</sup>90, Eve80, BHW<sup>+</sup>90, GL81, RS80b]. **Who** [Bur03, Hus85, KT80a, Mac92b, Sne11, SW80, Lav80b, Lav80c, Lea05, Mac92a, Mac99, McC79, Smi10, Ver90]. **Wide** [MK89a]. **Wiener** [Ano88d, AWL<sup>+</sup>88, MM97, MRFS87, Mas90, Ran87]. **Wigner** [BH89c]. **Wijngaarden** [dBvV81b, WZ89]. **Wildes** [WS86]. **Wilkes** [AMW<sup>+</sup>88]. **Wilkinson** [GND<sup>+</sup>87, TA81]. **William** [Ste80b, Wei89b, WTZ90, Wor87]. **Williams** [WLC86, ARE<sup>+</sup>87, Buc83, TSD<sup>+</sup>87]. **Winchester** [TBGE89]. **Windmill** [TBGE89]. **Winner** [Wei89a]. **Winning** [CCKSS90, Lee86]. **Winston** [TSD<sup>+</sup>87]. **Wolontis** [Ano86w]. **Wolontis-Bell** [Ano86w]. **Women** [BWK88, O'N92, CL05]. **Woodenwheel** [Gla86]. **Woodings** [RWSW85]. **Word** [Buc81, GM85, TTB<sup>+</sup>88]. **Words** [Per86]. **Work** [BHW<sup>+</sup>90, Dru82, Goo79, Goo80, GG90, HG79, Wil80b, Dub78, Mac83, Zem79, TSD<sup>+</sup>87]. **Works** [Ano88d, AWL<sup>+</sup>88, CSW90, BH89a, Hym88]. **workshop** [OLCJ91]. **Workstations** [AWB<sup>+</sup>88, Gol88, ACM00, CSW90]. **World** [AWL<sup>+</sup>88, Bur06, Ele81, HT79, HH79, Hin93, Hur86a, McC01, MK89a, SBET85, WTE<sup>+</sup>85, FM83, FM84a, Nat88, Pen89, Pen90, CW91, Koz84a, Koz84b]. **World-Wide** [MK89a]. **Worth** [Ano83c]. **Worthy** [AWL<sup>+</sup>88]. **Would** [Ham80]. **Writings** [Cop04].

**X** [Fut07]. **X3** [ML87]. **Xerox** [AW89, SA88].

**Yardley** [CCKSS90, Kru89]. **Yates** [CMF<sup>+</sup>90]. **Year** [Ano88e, Ano88f, Ano88g, Ano88h, Ano88i, TPG<sup>+</sup>89]. **Years** [Ano80c, ARE<sup>+</sup>87, Asp88, BCKS<sup>+</sup>83, Buc80b, CCKSS90, Est91, Gra73, Lee86, Mai88, Mar80, Mau84, Mil85, Sch81, Von89, Zem90a, BL82, CWM<sup>+</sup>91, OLCJ91, Sto82, Wil85e]. **York** [GIS90, WMS<sup>+</sup>89].

**Z.** [Ham79]. **Z3** [Cza79]. **Z4** [Spe80, Spe00, Zus80b]. **Zealand** [ARE<sup>+</sup>87, Wil85e]. **Zemanek** [CKSW83, Tro85]. **Zero** [WTE<sup>+</sup>85, Ber84, Ber87]. **zur** [ARE<sup>+</sup>87, Ric85]. **Zurich** [Spe00, Zus80b]. **Zuse** [Cza79, WLC86, Ano81k, Bau80, Bau00, Buc80a, Cer80, Cer81, Pet00, Roj00, Spe00].

## References

**Albers:1985:MPP**

[AA85a] Donald J. Albers and Gerald L. Alexanderson. *Mathematical people: profiles and interviews*. Birkhäuser Verlag, Basel, Switzerland, 1985. ISBN 0-8176-3191-7. xvi + 372 pp. LCCN QA28 .M371 1985. Published in cooperation with the Mathematical Association of America.

**Albinus:1985:AIC**

[AA85b] Hans-Joachim Albinus and Isaac L. Auerbach. Anecdotes: Islamic calendar; Howard Aiken. *Annals of the History of Computing*, 7(4):353–355, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/>

[AAA<sup>+</sup>86]

[an/books/an1985/pdf/a4353.pdf](http://www.computer.org/books/an1985/pdf/a4353.pdf); <http://www.computer.org/annals/an1985/a4353abs.htm>.

**Armer:1986:RQC**

Paul Armer, Morton M. Astrahan, Isaac L. Auerbach, Walter M. Carlson, Arnold A. Cohen, Margaret R. Fox, Claude A. R. Kagan, Morris Rubinoff, Jack Sherman, and Willis H. Ware. Reflections on a quarter-century: AFIPS founders. *Annals of the History of Computing*, 8(3):225–256, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1986/pdf/a3225.pdf>; <http://www.computer.org/annals/an1986/a3225abs.htm>.

**Albers:1990:MMP**

[AAR90]

Donald J. Albers, Gerald L. Alexanderson, and Constance Reid. *More mathematical people: contemporary conversations*. Harcourt Brace Jovanovich, San Diego, CA, USA, 1990. ISBN 0-15-158175-4. xviii + 375 pp. LCCN QA28 .M67 1990. US\$29.95.

**Andrews:1982:URD**

[AB82]

E. G. Andrews and H. W. Bode. Use of the relay digital computer. *Annals of the History of Computing*, 4(1):5–13, January/March 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1982/pdf/a1004>.

pdf; <http://www.computer.org/annals/an1982/a1004abs.htm>. Reprinted from *Electrical Engineering*, February 1950, pp. 158–163.

**Atanasoff:1981:CRA**

- [ABE<sup>+</sup>81] John V. Atanasoff, John Grist Brainerd, J. Presper Eckert, Kathleen R. Mauchly, Brian Randell, and Konrad Zuse. Commentary (with replies by the authors). *Annals of the History of Computing*, 3(4):389–399, October/December 1981. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a4389.pdf>.

**Aron:1983:DSR**

- [ABE<sup>+</sup>83] Joel D. Aron, Frederick P. Brooks, Jr., Bob O. Evans, John W. Fairclough, Aaron Finerman, Bernard A. Galler, William P. Heising, Walter H. Johnson, and Nancy Stern. Discussion of the SPREAD Report, June 23, 1982. *Annals of the History of Computing*, 5(1):27–44, January/March 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a1027.pdf>; <http://www.computer.org/annals/an1983/a1027abs.htm>.

**Aspray:1989:RFC**

- [ACK89] William Aspray and Martin Campbell-Kelly. Reviews:

Flamm: Creating the Computer: Government, Industry and High Technology. *Annals of the History of Computing*, 11(2):152, 154–155, April/June 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a2152.pdf>; <http://www.computer.org/annals/an1989/a2152abs.htm>.

**ACM:2000:PAC**

- [ACM00] ACM, editor. *Proceedings of the ACM Conference on the History of personal workstations: January 9–10, 1986, Palo Alto, CA, USA*. ACM Press, New York, NY, USA, 2000. ISBN 0-89791-176-8.

**Adams:1984:IF**

- [Ada84] Jeanne Adams. Institutionalization of FORTRAN. *Annals of the History of Computing*, 6(1):28, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1028.pdf>; <http://www.computer.org/annals/an1984/a1028abs.htm>.

**Aspray:1986:MMA**

- [AdB86] William Aspray and Donald deB. Beaver. Marketing the monster: Advertising computer technology. *Annals of the History of Computing*, 8(2):127–143, April/June 1986. CODEN AHCOE5. ISSN 0164-1239. URL

<http://dlib.computer.org/an/books/an1986/pdf/a2127.pdf>; <http://www.computer.org/annals/an1986/a2127abs.htm>.

**Addison:1984:EAT**

- [Add84] J. W. Addison. Eloge: Alfred Tarski, 1901–1983. *Annals of the History of Computing*, 6(4):335–336, October/December 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4335.pdf>; <http://www.computer.org/annals/an1984/a4335abs.htm>. [AFI72]

**Asimov:1985:RMM**

- [AF85] Isaac Asimov and Karen A. Frenkel. *Robots, machines in man's image*. Harmony Books, New York, NY, USA, 1985. ISBN 0-517-55110-1. 246 pp. LCCN TJ211 .A83 1985.

**Aspray:1989:RDI**

- [AFB<sup>+</sup>89] William Aspray, Kenneth Flamm, Ralf Bülow, Charles Hall, and Doron Swade. Reviews: Dorfman: Innovation and Market Structure: Lessons from the Computer and Semiconductor Industries; Herken: The Universal Machine: A Half-Century Survey; Lindgren: Glory and Failure: The Difference Engines of Johann Muller, Charles Babbage and Georg and Edvard Scheutz; Stein: Ada: Life and Legacy. *Annals of the History of Computing*, 11(1):54–60, January/March 1989. CODEN AH-

COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a1054.pdf>; <http://www.computer.org/annals/an1989/a1054abs.htm>.

**AFIPS:1972:FUJ**

AFIPS, editor. *First USA-Japan Computer Conference, Proceedings: October 3–5, 1972, Tokyo, Japan*. AFIPS Press, Montvale, NJ, USA, 1972. LCCN QA76 .U2 1972.

**Aspray:1989:ECN**

William Aspray and Michael Gunderloy. Early computing and numerical analysis at the National Bureau of Standards. *Annals of the History of Computing*, 11(1):3–12, January/March 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a1003.pdf>; <http://www.computer.org/annals/an1989/a1003abs.htm>.

**Aiken:1982:ASC**

Howard H. Aiken and Grace M. Hopper. The automatic sequence controlled calculator (1946). In Randell [Ran82], pages 203–222. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.

**Aiken:1982:PAC**

Howard H. Aiken. Proposed automatic calculating machine (1937). In Randell [Ran82],

pages 195–201. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.

**Astrahan:1983:HDS**

- [AJ83] Morton M. Astrahan and John F. Jacobs. History of the design of the SAGE computer — the AN/FSQ-7. *Annals of the History of Computing*, 5(4):340–349, October/December 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4340.pdf>; <http://www.computer.org/annals/an1983/a4340abs.htm>.

**Allen:1984:TRE**

- [All84] Frances E. Allen. A technological review of the early FORTRAN compilers. *Annals of the History of Computing*, 6(1):22–25, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1015.pdf>; <http://www.computer.org/annals/an1984/a1015abs.htm>.

**Allison:1991:MAM**

- [All91] David Allison. Museums and archives. Musée national des techniques. Conservatoire national des arts et Métiers. National Museum of American History, Smithsonian Institution publications and artifacts. Unisys donates Burroughs historical records to Charlesabbage Institute. Digital Equip-

ment Corporation’s historical collection program. *Annals of the History of Computing*, 13(4):351–353, October/December 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a4351.pdf>; <http://www.computer.org/annals/an1991/a4351abs.htm>.

**Alt:1982:BTL**

- [Alt82] Franz L. Alt. A Bell Telephone Laboratories’ computing machine (1948). In Randell [Ran82], pages 263–292. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.

**Amaya:1983:ILA**

- [Ama83] Leland H. Amaya. 3 & 18. the 701 installation at Lockheed Aircraft. *Annals of the History of Computing*, 5(2):184–185, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2184.pdf>; <http://www.computer.org/annals/an1983/a2184abs.htm>.

**Amdahl:1983:R**

- [Amd83] Gene M. Amdahl. Recollections of the 701A. *Annals of the History of Computing*, 5(2):213–215, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2213b.pdf>; <http://www.computer.org/annals/an1983/a2213abs.htm>.

- org/annals/an1983/a2213babs.htm.
- [Amo90] Albert Amouyal. The beginnings of computing activities at the Atomic Energy Authority, 1952–1972. *Annals of the History of Computing*, 12(4):219–225, October/December 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4219.pdf>; <http://www.computer.org/annals/an1990/a4219abs.htm>.
- [AMTC80] Florence R. Anderson, Jerry Mendelson, Erwin Tomash, and Arnold A. Cohen. Comments, queries, and debate: BNAC at Northrop; More Thoughts on BKVAC; Addendum on ERA. *Annals of the History of Computing*, 2(1):83–88, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1083.pdf>; <http://www.computer.org/annals/an1980/a1083abs.htm>. [Ano48]
- [AMW<sup>+</sup>88] William Aspray, A. R. Mackintosh, Eric A. Weiss, John McCarthy, and M. Woodger. Reviews: Burks and Burks: The First Electronic Computer: The Atanasoff Story; Queisser: The Conquest of the Microchip; Bloomfield (ed.): The Question of Artificial Intelligence: Philosophical and Sociological Perspectives; Wilkes: Memoirs of a Computer Pioneer; other literature. *Annals of the History of Computing*, 10(3):221–233, July/September 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a3221.pdf>; <http://www.computer.org/annals/an1988/a3221abs.htm>.
- [And82] E. G. Andrews. Telephone switching and the early Bell Laboratories computers. *Annals of the History of Computing*, 4(1):13–19, January/March 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1004.pdf>; <http://www.computer.org/annals/an1982/a1004abs.htm>. Reprinted from the Bell System Technical Journal, March 1963, pp. 341–353.
- [Anonymous:1948:PSL] Anonymous, editor. *Proceedings of a Symposium on Large-Scale Digital Calculating Machinery: Jointly Sponsored by The Navy Department Bureau of Ordnance and Harvard University at The Computation Laboratory 7–10 January 1947*, volume 16 of *The Annals of the Computation Laboratory of Harvard University*. Harvard University Press, Cambridge, MA,

USA, 1948. LCCN QA75 .S96  
1947.

**Anonymous:1979:CQD**

[Ano79a]

Anonymous. Comments, queries and debate: Early machines. *Annals of the History of Computing*, 1(1):78, July/September 1979. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1078.pdf>; <http://www.computer.org/annals/an1979/a1078abs.htm>.

**Anonymous:1979:CAH**

[Ano79b]

Anonymous. Contributions to the Annals of the History of Computing. *Annals of the History of Computing*, 1(1):79–80, July/September 1979. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1079.pdf>; <http://www.computer.org/annals/an1979/a1079abs.htm>.

**Anonymous:1979:NNC**

[Ano79c]

Anonymous. News and notices: 1949 conference proceedings reprinted; EDSAC film available; Contemporary Scientific Archives Centre. *Annals of the History of Computing*, 1(1):77–78, July/September 1979. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1077.pdf>; <http://www.computer.org/annals/an1979/a1077abs.htm>.

**Anonymous:1979:NNR**

[Ano79d]

Anonymous. News and notices: Recordings by pioneers of computing; historic film on MANIAC I. *Annals of the History of Computing*, 1(2):208, October/December 1979. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a2208.pdf>; <http://www.computer.org/annals/an1979/a2208abs.htm>.

**Anonymous:1980:CAH**

[Ano80a]

Anonymous. Contributions to the Annals of the History of Computing. *Annals of the History of Computing*, 2(1):95–96, January/March 1980. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1095.pdf>; <http://www.computer.org/annals/an1980/a1095abs.htm>.

**Anonymous:1980:CEE**

[Ano80b]

Anonymous. Corrections: Early electronic computer developments at IBM, 2(3) 256; Corrections, 2(3) 274, 279. *Annals of the History of Computing*, 2(4):377, October/December 1980. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4377.pdf>; <http://www.computer.org/annals/an1980/a4377babs.htm>. See [Phe80, Ano80c].



- [Ano80c] **Anonymous:1980:CRM**  
 Anonymous. Corrections: Reviews: M. Graef: 350 Years of Computing Machines, 2(1) 90, 93; The First Seven Years of Polish Digital Computers, 2(1) 41; Programming the Mark I: Early Programming Activity at the University of Manchester, 2(2), 155. *Annals of the History of Computing*, 2(3):274–280, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3274.pdf>; <http://www.computer.org/annals/an1980/a3274abs.htm>. See [Gru79, Ano80b, Buc80b, CK80b, Mar80].
- [Ano80d] **Anonymous:1980:GA**  
 Anonymous. Guidelines for authors. *Annals of the History of Computing*, 2(2):191, April/June 1980. CODEN AHCOE5. ISSN 0164-1239.
- [Ano80e] **Anonymous:1980:NGR**  
 Anonymous. News: Galler receives ACM Award. *Annals of the History of Computing*, 2(4):372, October/December 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4372.pdf>; <http://www.computer.org/annals/an1980/a4372abs.htm>.
- [Ano80f] **Anonymous:1980:Ra**  
 Anonymous. Referees. *Annals of the History of Computing*, 2(4):377, October/December 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4377.pdf>; <http://www.computer.org/annals/an1980/a4377babs.htm>.
- [Ano80g] **Anonymous:1980:Rb**  
 Anonymous. Referees. *Annals of the History of Computing*, 2(4):377, October/December 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4377.pdf>; <http://www.computer.org/annals/an1980/a4377aabs.htm>.
- [Ano81a] **Anonymous:1981:AIV**  
 Anonymous. Author index to volumes 1 and 2, *Annals of the History of Computing*, 3(1):85, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1085.pdf>; <http://www.computer.org/annals/an1981/a1085abs.htm>.
- [Ano81b] **Anonymous:1981:CQD**  
 Anonymous. Comments, queries, and debate: Query on Babbage. *Annals of the History of Computing*, 3(3):288, July/September 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/>

- an/books/an1981/pdf/a3288.pdf; <http://www.computer.org/annals/an1981/a3288abs.htm>.
- [Ano81c] **Anonymous:1981:CVA**  
 Anonymous. Contents of volumes 1 and 2, Annals of the History of Computing. *Annals of the History of Computing*, 3(1):86, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1085.pdf>; <http://www.computer.org/annals/an1981/a1085abs.htm>.
- [Ano81d] **Anonymous:1981:CAH**  
 Anonymous. Contributions to the Annals of the History of Computing. *Annals of the History of Computing*, 3(1):83–84, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1083.pdf>; <http://www.computer.org/annals/an1981/a1083abs.htm>.
- [Ano81e] **Anonymous:1981:CHP**  
 Anonymous. Corrections: How Polish Mathematicians Deciphered the Enigma, 3(3) 232, Reviews: H. H. Goldstine: A History of Numerical Analysis, 3(3) 293. *Annals of the History of Computing*, 3(4):407, October/December 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a4400.pdf>. See [Rej81, SWT<sup>+</sup>81].
- [Ano81f] **Anonymous:1981:ES**  
 Anonymous. An editorial statement. *Annals of the History of Computing*, 3(3):212, July/September 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a3212.pdf>; <http://www.computer.org/annals/an1981/a3212abs.htm>.
- [Ano81g] **Anonymous:1981:GA**  
 Anonymous. Guidelines for authors. *Annals of the History of Computing*, 3(1):81–82, January/March 1981. CODEN AH-COE5. ISSN 0164-1239.
- [Ano81h] **Anonymous:1981:IV**  
 Anonymous. Indexes to volumes 1 and 2, Annals of the History of Computing. *Annals of the History of Computing*, 3(1):87–109, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1085.pdf>; <http://www.computer.org/annals/an1981/a1085abs.htm>.
- [Ano81i] **Anonymous:1981:NNH**  
 Anonymous. News and notices: History and Philosophy of Logic Award to Erwin Tomash; CBI moves to Minneapolis. *Annals of the History of Computing*, 3(1):72, Jan-

- uary/March 1981. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1072b.pdf>; <http://www.computer.org/annals/an1981/a1072babs.htm>. [Ano82a]
- [Ano81j] Anonymous. News and notices: New CBI Director; CBI Fellowship Award; Digital Computer Museum; Pioneers of Computing; HOPL Tapes. *Annals of the History of Computing*, 3(3):286–287, July/September 1981. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a3286.pdf>; <http://www.computer.org/annals/an1981/a3286abs.htm>. [Ano82b]
- [Ano81k] Anonymous. News and notices: Survey of sources in the history of information processing; history of computing at the University of Warwick; Zuse at Digital Museum. *Annals of the History of Computing*, 3(2):192–193, April/June 1981. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a2192.pdf>; <http://www.computer.org/annals/an1981/a2192abs.htm>. [Ano82c]
- [Ano81l] Anonymous. Referees. *Annals of the History of Computing*, 3(4):415, October/December 1981. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3218.pdf>; <http://www.computer.org/annals/an1982/a3218abs.htm>. Foreword by Eric A. Weiss.
- [Ano81m] Anonymous. Index to volume 3. *Annals of the History of Computing*, 4(1):81–96, January/March 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1081.pdf>; <http://www.computer.org/annals/an1982/a1081abs.htm>.
- [Ano81n] Anonymous. Instructions for authors. *Annals of the History of Computing*, 4(1):79, January/March 1982. CODEN AHCOE5. ISSN 0164-1239.
- [Ano81o] Anonymous. Mauchly: Unpublished remarks: Letter to Henry Tropp, September 28, 1978; Letter to H. Helm Clayton, November 15, 1940; Fireside Chat, November 13, 1973 (Introduction by Carl Hammer); Afterword by Arthur W.

**Anonymous:1981:NNN****Anonymous:1981:NNS****Anonymous:1981:R****Anonymous:1982:DRB****Anonymous:1982:IV****Anonymous:1982:IA****Anonymous:1982:MUR**

Burks and Alice R. Burks. *Annals of the History of Computing*, 4(3):245–256, July/September 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3245.pdf>; <http://www.computer.org/annals/an1982/a3245abs.htm>. Foreword by Henry S. Tropp.

**Anonymous:1982:NNPa**

[Ano82e]

Anonymous. News and notices: Pioneer Award Established by Computer Society; Undergraduate Paper Competition in Cryptology. *Annals of the History of Computing*, 4(2):184, April/June 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a2184.pdf>; <http://www.computer.org/annals/an1982/a2184abs.htm>.

**Anonymous:1982:NNPb**

[Ano82f]

Anonymous. News and notices: Pioneer Day to Celebrate Harvard at 1983 NCC; Meeting on Charles Babbage. *Annals of the History of Computing*, 4(4):373, October/December 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a4373.pdf>; <http://www.computer.org/annals/an1982/a4373abs.htm>.

**Anonymous:1982:NNR**

[Ano82g]

Anonymous. News and no-

tices: Research Projects in the History of Computing; New Publisher for History and Philosophy of Logic; Pioneer Day at 1982 NCC; Digital Computer Museum Opens to Public; History of Solid-State Physics. *Annals of the History of Computing*, 4(1):68, January/March 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1068.pdf>; <http://www.computer.org/annals/an1982/a1068abs.htm>.

**Anonymous:1982:R**

[Ano82h]

Anonymous. Referees. *Annals of the History of Computing*, 4(4):373, October/December 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a4374.pdf>; <http://www.computer.org/annals/an1982/a4374abs.htm>.

**Anonymous:1982:SA**

[Ano82i]

Anonymous. Suggestions for authors. *Annals of the History of Computing*, 4(1):80, January/March 1982. CODEN AHCOE5. ISSN 0164-1239.

**Anonymous:1983:UNA**

[Ano83a]

Anonymous. 15. U.S. Naval Aviation supply, Editor's note. *Annals of the History of Computing*, 5(2):206, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/>

- an/books/an1983/pdf/a2206a.pdf; <http://www.computer.org/annals/an1983/a2206aabs.htm>. [Ano83e]
- [Ano83b] **Anonymous:1983:UWB**  
 Anonymous. 19. the 701 at the U.S. Weather Bureau, Editor's note. *Annals of the History of Computing*, 5(2):212, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2212.pdf>; <http://www.computer.org/annals/an1983/a2212abs.htm>. [Ano83f]
- [Ano83c] **Anonymous:1983:CFW**  
 Anonymous. 7. the 701 at Convair, Fort Worth, Editor's note. *Annals of the History of Computing*, 5(2):197-198, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2197.pdf>; <http://www.computer.org/annals/an1983/a2197abs.htm>. [Ano83g]
- [Ano83d] **Anonymous:1983:UAE**  
 Anonymous. 9. the 701 at United Aircraft, Editor's note. *Annals of the History of Computing*, 5(2):201, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2201a.pdf>; <http://www.computer.org/annals/an1983/a2201aabs.htm>. [Ano83h]
- Anonymous:1983:AR1a**  
 Anonymous. Announcement of rate increase. *Annals of the History of Computing*, 5(3):316, July/September 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3310.pdf>; <http://www.computer.org/annals/an1983/a3310abs.htm>.
- Anonymous:1983:AR1b**  
 Anonymous. Announcement of rate increase. *Annals of the History of Computing*, 5(4):411, October/December 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4411.pdf>; <http://www.computer.org/annals/an1983/a4411abs.htm>.
- Anonymous:1983:ASSa**  
 Anonymous. Answers to self-study questions. *Annals of the History of Computing*, 5(3):308-309, July/September 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3302.pdf>; <http://www.computer.org/annals/an1983/a3302abs.htm>.
- Anonymous:1983:ASSb**  
 Anonymous. Answers to self-study questions. *Annals of the History of Computing*, 5(4):409-410, October/December 1983. CODEN AH-

COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4411.pdf>; <http://www.computer.org/annals/an1983/a4411abs.htm>. [Ano83l]

**Anonymous:1983:CEM**

[Ano83i] Anonymous. Computing engineering manual (Douglas Aircraft Company). *Annals of the History of Computing*, 5(2):193–194, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2193.pdf>; <http://www.computer.org/annals/an1983/a2193abs.htm>. [Ano83m]

**Anonymous:1983:Ca**

[Ano83j] Anonymous. Contributors. *Annals of the History of Computing*, 5(2):107–109, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2107b.pdf>; <http://www.computer.org/annals/an1983/a2107babs.htm>. [Ano83n]

**Anonymous:1983:Cb**

[Ano83k] Anonymous. Contributors. *Annals of the History of Computing*, 5(4):320–322, October/December 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4320.pdf>; <http://www.computer.org/annals/an1983/a4320abs.htm>. [Ano83o]

**Anonymous:1983:CPP**

Anonymous. Correction: Programming the Pilot ACE: Early Programming Activity at the National Physical Laboratory, 3(2) 162. *Annals of the History of Computing*, 5(4):405, October/December 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4404.pdf>; <http://www.computer.org/annals/an1983/a4404abs.htm>. See [CK81].

**Anonymous:1983:CEC**

Anonymous. Customer education classes. *Annals of the History of Computing*, 5(2):162–163, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2162.pdf>; <http://www.computer.org/annals/an1983/a2162abs.htm>.

**Anonymous:1983:DCS**

Anonymous. Dual coding system (Los Alamos manual). *Annals of the History of Computing*, 5(2):182–184, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2182.pdf>; <http://www.computer.org/annals/an1983/a2182abs.htm>.

**Anonymous:1983:ENAc**

Anonymous. Editor's note:

- Announcement and dedication. *Annals of the History of Computing*, 5(2):155, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2155.pdf>; <http://www.computer.org/annals/an1983/a2155abs.htm>. [Ano83s]
- Anonymous:1983:ENAb**
- [Ano83p] Anonymous. Editor's note: Application testing. *Annals of the History of Computing*, 5(2):142, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2142a.pdf>; <http://www.computer.org/annals/an1983/a2142aabs.htm>. [Ano83t]
- Anonymous:1983:ENAA**
- [Ano83q] Anonymous. Editor's note: Architecture. *Annals of the History of Computing*, 5(2):115, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2115a.pdf>; <http://www.computer.org/annals/an1983/a2115aabs.htm>. [Ano83u]
- Anonymous:1983:ENC**
- [Ano83r] Anonymous. Editor's note: Customer experiences. *Annals of the History of Computing*, 5(2):175, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2175.pdf>; <http://www.computer.org/annals/an1983/a2175abs.htm>. [Ano83s]
- Anonymous:1983:ENE**
- Anonymous. Editor's note: Engineering. *Annals of the History of Computing*, 5(2):118, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2118a.pdf>; <http://www.computer.org/annals/an1983/a2118aabs.htm>. [Ano83t]
- Anonymous:1983:ENI**
- Anonymous. Editor's note: Installation. *Annals of the History of Computing*, 5(2):146, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2146a.pdf>; <http://www.computer.org/annals/an1983/a2146aabs.htm>. [Ano83u]
- Anonymous:1983:ENPa**
- Anonymous. Editor's note: Planning. *Annals of the History of Computing*, 5(2):112, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2112a.pdf>; <http://www.computer.org/annals/an1983/a2112aabs.htm>. [Ano83v]
- Anonymous:1983:ENPb**
- Anonymous. Editor's note: Programming. *Annals of the History of Computing*, 5(2):125,

- April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2125a.pdf>; <http://www.computer.org/annals/an1983/a2125aabs.htm>. [Ano83z]
- Anonymous:1983:ENS**
- [Ano83w] Anonymous. Editor's note: Sales and customer installation. *Annals of the History of Computing*, 5(2):161, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2161.pdf>; <http://www.computer.org/annals/an1983/a2161abs.htm>. [Ano83-27]
- Anonymous:1983:ENTa**
- [Ano83x] Anonymous. Editor's note: Technical Computing Bureau. *Annals of the History of Computing*, 5(2):148-149, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2148.pdf>; <http://www.computer.org/annals/an1983/a2148abs.htm>. [Ano83-28]
- Anonymous:1983:ENTb**
- [Ano83y] Anonymous. Editor's note: The Type 701A (704). *Annals of the History of Computing*, 5(2):213, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2213a.pdf>; <http://www.computer.org/annals/an1983/a2213aabs.htm>. [Ano83-29]
- Anonymous:1983:FPA**
- Anonymous. Front page of the April 1953 IBM Record. *Annals of the History of Computing*, 5(2):156, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2156.pdf>; <http://www.computer.org/annals/an1983/a2156abs.htm>.
- Anonymous:1983:ISS**
- Anonymous. IBM Speedcoding System (from IBM manual). *Annals of the History of Computing*, 5(2):135-139, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2135.pdf>; <http://www.computer.org/annals/an1983/a2135abs.htm>.
- Anonymous:1983:II**
- Anonymous. Index information. *Annals of the History of Computing*, 5(4):405, October/December 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4404.pdf>; <http://www.computer.org/annals/an1983/a4404abs.htm>.
- Anonymous:1983:IVA**
- Anonymous. Index, volume 4, *Annals of the History of Com-*



- puting. *Annals of the History of Computing*, 5(1):89–102, January/March 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a1089.pdf>; <http://www.computer.org/annals/an1983/a1089abs.htm>.
- Anonymous:1983:IA**
- [Ano83-30] Anonymous. Instructions for authors. *Annals of the History of Computing*, 5(1):87, January/March 1983. CODEN AHCOE5. ISSN 0164-1239.
- Anonymous:1983:LHL**
- [Ano83-31] Anonymous. Letter from L. H. LaMotte, May 21, 1952. *Annals of the History of Computing*, 5(2):114, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2114.pdf>; <http://www.computer.org/annals/an1983/a2114abs.htm>.
- Anonymous:1983:ACC**
- [Ano83-32] Anonymous. Los Angeles Cooperative Compiler Project Policy Committee minutes. *Annals of the History of Computing*, 5(2):139–141, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2139.pdf>; <http://www.computer.org/annals/an1983/a2139abs.htm>.
- Anonymous:1983:NNAA**
- [Ano83-33] Anonymous. News and notices: AFIPS Award Nominations Invited; CBI Appoints Associate Director; Journal of Robotics Announced; CBI Begins Development of Historical Database. *Annals of the History of Computing*, 5(1):75, January/March 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a1075.pdf>; <http://www.computer.org/annals/an1983/a1075abs.htm>.
- Anonymous:1983:NNAb**
- [Ano83-34] Anonymous. News and notices: Associate Director for CBI; Computer Museum Moving to Boston; AFIPS Presents Awards to Andahl, Kemeny, and Tanaka; Abacus to Begin Publication. *Annals of the History of Computing*, 5(4):407–408, October/December 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4407b.pdf>; <http://www.computer.org/annals/an1983/a4407babs.htm>.
- Anonymous:1983:NNM**
- [Ano83-35] Anonymous. News and notices: Mina Rees Awarded NAS Public Welfare Medal; Historical Dictionary on Data Processing. *Annals of the History of Computing*, 5(3):307, July/September 1983. CODEN AH-

- COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3307.pdf>; <http://www.computer.org/annals/an1983/a3307abs.htm>. [Ano83-39]
- [Ano83-36] Anonymous. Principles of operation: Type 701 and associated equipment (from IBM manual). *Annals of the History of Computing*, 5(2):164–166, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2164.pdf>; <http://www.computer.org/annals/an1983/a2164abs.htm>. [Ano84a]
- [Ano83-37] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 5(3):302–303, 308–309, July/September 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3302.pdf>; <http://www.computer.org/annals/an1983/a3302abs.htm>. [Ano84b]
- [Ano83-38] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 5(4):407, 409–411, October/December 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4407a.pdf>; <http://www.computer.org/annals/an1983/a4407aabs.htm>. [Ano84c]
- [Ano83-39] Anonymous. Suggestions for authors. *Annals of the History of Computing*, 5(1):88–89, January/March 1983. CODEN AH-COE5. ISSN 0164-1239.
- [Ano84a] Anonymous. About this issue. *Annals of the History of Computing*, 6(2):99, April/June 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2099.pdf>; <http://www.computer.org/annals/an1984/a2099abs.htm>.
- [Ano84b] Anonymous. About this issue. *Annals of the History of Computing*, 6(3):227–228, July/September 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a3227.pdf>; <http://www.computer.org/annals/an1984/a3227abs.htm>.
- [Ano84c] Anonymous. About this issue. *Annals of the History of Computing*, 6(4):331, October/December 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4331.pdf>; <http://www.computer.org/annals/an1984/a4331abs.htm>.

- org/annals/an1984/a4331abs.htm.
- Anonymous:1984:AWB**
- [Ano84d] Anonymous. Anecdotes: Whence the “bug”? *Annals of the History of Computing*, 6(4):409, October/December 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4409.pdf>; <http://www.computer.org/annals/an1984/a4409abs.htm>. [Ano84h]
- Anonymous:1984:C**
- [Ano84e] Anonymous. Contributors. *Annals of the History of Computing*, 6(1):4–6, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1004.pdf>; <http://www.computer.org/annals/an1984/a1004abs.htm>. [Ano84i]
- Anonymous:1984:CIV**
- [Ano84f] Anonymous. Cumulative index to volumes 1–5, *Annals of the History of Computing*, 6(2):189–224, April/June 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2189.pdf>; <http://www.computer.org/annals/an1984/a2189abs.htm>. [Ano84j]
- Anonymous:1984:IVA**
- [Ano84g] Anonymous. Index to volume 5, *Annals of the History of Computing*, 6(1):83–96, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1083.pdf>; <http://www.computer.org/annals/an1984/a1083abs.htm>. [Ano84k]
- Anonymous:1984:IA**
- Anonymous. Instructions for authors. *Annals of the History of Computing*, 6(1):81, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1083.pdf>; <http://www.computer.org/annals/an1984/a1083abs.htm>. [Ano84l]
- Anonymous:1984:NNa**
- Anonymous. News and notices. *Annals of the History of Computing*, 6(1):70–71, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1070.pdf>; <http://www.computer.org/annals/an1984/a1070abs.htm>. [Ano84m]
- Anonymous:1984:NNb**
- Anonymous. News and notices. *Annals of the History of Computing*, 6(2):166–167, April/June 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2166.pdf>; <http://www.computer.org/annals/an1984/a2166abs.htm>. [Ano84n]

- org/annals/an1984/a2166abs.htm.
- [Ano84k] Anonymous. News and notices. *Annals of the History of Computing*, 6(3):316, July/September 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a3316b.pdf>; <http://www.computer.org/annals/an1984/a3316babs.htm>. [Ano84o]
- [Ano84l] Anonymous. News and notices. *Annals of the History of Computing*, 6(4):408, October/December 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4408.pdf>; <http://www.computer.org/annals/an1984/a4408abs.htm>. [Ano84p]
- [Ano84m] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 6(1):69, 72-73, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1069.pdf>; <http://www.computer.org/annals/an1984/a1069abs.htm>. [Ano84q]
- [Ano84n] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 6(2):156, 164-165, April/June 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2156.pdf>; <http://www.computer.org/annals/an1984/a2156abs.htm>. [Ano84o]
- [Ano84o] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 6(3):316, 318, July/September 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a3316a.pdf>; <http://www.computer.org/annals/an1984/a3316aabs.htm>. [Ano84p]
- [Ano84p] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 6(4):401, 405-407, October/December 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4401.pdf>; <http://www.computer.org/annals/an1984/a4401abs.htm>. [Ano84q]
- [Ano84q] Anonymous. Suggestions for authors. *Annals of the History of Computing*, 6(1):82, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1083.pdf>.

- pdf; <http://www.computer.org/annals/an1984/a1083abs.htm>.
- [Ano85a] Anonymous. About this issue. *Annals of the History of Computing*, 7(1):3, January/March 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1985/pdf/a1003.pdf>; <http://www.computer.org/annals/an1985/a1003abs.htm>.
- Anonymous:1985:AIa**
- [Ano85e] Anonymous. Contributors. *Annals of the History of Computing*, 7(4):284–285, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1985/pdf/a4284.pdf>; <http://www.computer.org/annals/an1985/a4284abs.htm>.
- Anonymous:1985:C**
- [Ano85b] Anonymous. About this issue. *Annals of the History of Computing*, 7(2):99, April/June 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1985/pdf/a2099.pdf>; <http://www.computer.org/annals/an1985/a2099abs.htm>.
- Anonymous:1985:AIb**
- [Ano85f] Anonymous. Early meetings of the Conference on Data Systems Languages: Languages: Summary of meeting, May 28–29, 1959; minutes of meeting, July 7, 1959; minutes of meeting, January 7–8, 1960; minutes of meeting, February 12, 1960. *Annals of the History of Computing*, 7(4):316–325, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1985/pdf/a4316.pdf>; <http://www.computer.org/annals/an1985/a4316abs.htm>.
- Anonymous:1985:EMC**
- [Ano85c] Anonymous. About this issue. *Annals of the History of Computing*, 7(3):195, July/September 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1985/pdf/a3195.pdf>; <http://www.computer.org/annals/an1985/a3195abs.htm>.
- Anonymous:1985:AIc**
- [Ano85d] Anonymous. About this issue. *Annals of the History of Computing*, 7(4):283, October/
- Anonymous:1985:AIId**
- [Ano85g] Anonymous. Index to volume 6, *Annals of the History of Computing*, 7(1):83–95, Jan-
- Anonymous:1985:IVA**

- uary/March 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1083.pdf>; <http://www.computer.org/annals/an1985/a1083abs.htm>. [Ano85k]
- [Ano85h] Anonymous. Instructions for authors. *Annals of the History of Computing*, 7(1):81, January/March 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1083.pdf>; <http://www.computer.org/annals/an1985/a1083abs.htm>. [Ano85l]
- [Ano85i] Anonymous. Meetings of the intermediate-range committee: Minutes of meeting October 8–9, 1959; minutes of meeting October 14, 1959. *Annals of the History of Computing*, 7(4):329–341, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4329.pdf>; <http://www.computer.org/annals/an1985/a4329abs.htm>. [Ano85m]
- [Ano85j] Anonymous. News and notices. *Annals of the History of Computing*, 7(1):66–67, January/March 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1066.pdf>; <http://www.computer.org/annals/an1985/a1066abs.htm>. [Ano85n]
- [Ano85k] Anonymous. News and notices. *Annals of the History of Computing*, 7(2):184, April/June 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a2184.pdf>; <http://www.computer.org/annals/an1985/a2184abs.htm>. [Ano85o]
- [Ano85l] Anonymous. News and notices. *Annals of the History of Computing*, 7(3):253–255, July/September 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a3253.pdf>; <http://www.computer.org/annals/an1985/a3253abs.htm>. [Ano85p]
- [Ano85m] Anonymous. Notices. *Annals of the History of Computing*, 7(4):362–363, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4362.pdf>; <http://www.computer.org/annals/an1985/a4362abs.htm>. [Ano85q]
- [Ano85n] Anonymous. Self-study questions & answers. *Annals*

- of the *History of Computing*, 7(1):65, 68–69, January/March 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1065.pdf>; <http://www.computer.org/annals/an1985/a1065abs.htm>. [Ano85r]
- Anonymous:1985:SSQb**
- [Ano85o] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 7(2):166, 177–178, April/June 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a2166.pdf>; <http://www.computer.org/annals/an1985/a2166abs.htm>. [Ano86a]
- Anonymous:1985:SSQc**
- [Ano85p] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 7(3):255, 257–258, July/September 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a3255.pdf>; <http://www.computer.org/annals/an1985/a3255abs.htm>. [Ano86b]
- Anonymous:1985:SSQd**
- [Ano85q] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 7(4):355, 361, October/December 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4355.pdf>; <http://www.computer.org/annals/an1985/a4355abs.htm>.
- Anonymous:1985:SA**
- Anonymous. Suggestions for authors. *Annals of the History of Computing*, 7(1):82–82 (??), January/March 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1083.pdf>; <http://www.computer.org/annals/an1985/a1083abs.htm>.
- Anonymous:1986:AEN**
- Anonymous. Announcement: Editor's note. *Annals of the History of Computing*, 8(1):8, January/March 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1008a.pdf>; <http://www.computer.org/annals/an1986/a1008aabs.htm>.
- Anonymous:1986:BHA**
- Anonymous. Brief history of AFIPS and its constituent societies. *Annals of the History of Computing*, 8(3):219–224, July/September 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3219.pdf>; <http://www.computer.org/annals/an1986/a3219abs.htm>.

- [Ano86c] **Anonymous:1986:CSA**  
 Anonymous. Computation seminar, August 1955. *Annals of the History of Computing*, 8(1):62–65, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1062b.pdf>; <http://www.computer.org/annals/an1986/a1062babs.htm>.
- [Ano86d] **Anonymous:1986:Ca**  
 Anonymous. Contributors. *Annals of the History of Computing*, 8(1):3–6, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1003b.pdf>; <http://www.computer.org/annals/an1986/a1003babs.htm>.
- [Ano86e] **Anonymous:1986:Cb**  
 Anonymous. Contributors. *Annals of the History of Computing*, 8(3):212–215, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3212.pdf>; <http://www.computer.org/annals/an1986/a3212abs.htm>.
- [Ano86f] **Anonymous:1986:ENa**  
 Anonymous. Editor's note. *Annals of the History of Computing*, 8(1):35, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1035.pdf>; <http://www.computer.org/annals/an1986/a1035abs.htm>.
- [Ano86g] **Anonymous:1986:ENb**  
 Anonymous. Editor's note. *Annals of the History of Computing*, 8(1):62, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1062b.pdf>; <http://www.computer.org/annals/an1986/a1062babs.htm>.
- [Ano86h] **Anonymous:1986:EEN**  
 Anonymous. Engineering: Editor's note. *Annals of the History of Computing*, 8(1):10–11, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1010.pdf>; <http://www.computer.org/annals/an1986/a1010abs.htm>.
- [Ano86i] **Anonymous:1986:IVAa**  
 Anonymous. Index to volume 7, 1985: Annals of the history of computing. *Annals of the History of Computing*, 8(1):101–111, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1101.pdf>; <http://www.computer.org/annals/an1986/a1101abs.htm>.



- [Ano86j] **Anonymous:1986:IVAb**  
 Anonymous. Index to volume 8, 1986, *Annals of the History of Computing*, 8(4):385–397, October/December 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4385.pdf>; <http://www.computer.org/annals/an1986/a4385abs.htm>.
- [Ano86k] **Anonymous:1986:IA**  
 Anonymous. Instructions for authors. *Annals of the History of Computing*, 8(1):99, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1101.pdf>; <http://www.computer.org/annals/an1986/a1101abs.htm>.
- [Ano86l] **Anonymous:1986:Na**  
 Anonymous. Notices. *Annals of the History of Computing*, 8(1):89–90, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1089b.pdf>; <http://www.computer.org/annals/an1986/a1089babs.htm>.
- [Ano86m] **Anonymous:1986:Nb**  
 Anonymous. Notices. *Annals of the History of Computing*, 8(2):193–194, April/June 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a2193.pdf>; <http://www.computer.org/annals/an1986/a2193abs.htm>.
- [Ano86n] **Anonymous:1986:Nc**  
 Anonymous. Notices. *Annals of the History of Computing*, 8(4):377–379, October/December 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4377.pdf>; <http://www.computer.org/annals/an1986/a4377abs.htm>.
- [Ano86o] **Anonymous:1986:OPI**  
 Anonymous. “Optimum Programming” from IBM 650 Manual of Operation. *Annals of the History of Computing*, 8(1):32–34, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1032.pdf>; <http://www.computer.org/annals/an1986/a1032abs.htm>.
- [Ano86p] **Anonymous:1986:PAA**  
 Anonymous. Programming aids and applications: Editor’s note. *Annals of the History of Computing*, 8(1):62, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1062a.pdf>; <http://www.computer.org/annals/an1986/a1062aabs.htm>.

- org/annals/an1986/a1062aabs.htm.
- [Ano86q] Anonymous. Referees. *Annals of the History of Computing*, 8(4):383–384, October/December 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4383.pdf>; <http://www.computer.org/annals/an1986/a4383abs.htm>.
- Anonymous:1986:R**
- [Ano86r] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 8(1):89, 92–93, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1089a.pdf>; <http://www.computer.org/annals/an1986/a1089aabs.htm>.
- Anonymous:1986:SSQa**
- [Ano86s] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 8(2):194, 196–197, April/June 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a2194.pdf>; <http://www.computer.org/annals/an1986/a2194abs.htm>.
- Anonymous:1986:SSQb**
- [Ano86t] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 8(3):311, 313–314, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3311.pdf>; <http://www.computer.org/annals/an1986/a3311abs.htm>.
- Anonymous:1986:SSQd**
- [Ano86u] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 8(4):373, 376–377, October/December 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4373.pdf>; <http://www.computer.org/annals/an1986/a4373abs.htm>.
- Anonymous:1986:SA**
- [Ano86v] Anonymous. Suggestions for authors. *Annals of the History of Computing*, 8(1):100, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1101.pdf>; <http://www.computer.org/annals/an1986/a1101abs.htm>.
- Anonymous:1986:WBI**
- [Ano86w] Anonymous. Wolontis-Bell interpreter. *Annals of the History of Computing*, 8(1):74–76, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1074.pdf>; <http://www.computer.org/annals/an1986/a1074abs.htm>.
- Anonymous:1986:SSQc**
- [Ano86t] Anonymous. Self-study questions & answers. *Annals of the History of Computing*, 8(1):74–76, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1074.pdf>; <http://www.computer.org/annals/an1986/a1074abs.htm>.

- org/annals/an1986/a1074abs.htm.
- [Ano87a] **Anonymous:1987:C**  
 Anonymous. Contributors. *Annals of the History of Computing*, 9(1):2–5, January/March 1987. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1002.pdf>; <http://www.computer.org/annals/an1987/a1002abs.htm>.
- [Ano87b] **Anonymous:1987:IV**  
 Anonymous. Index to volume 9, 1987/88. *Annals of the History of Computing*, 9(3/4):387–406, July/September 1987. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3387.pdf>; <http://www.computer.org/annals/an1987/a3387abs.htm>.
- [Ano88a] **Anonymous:1988:AE**  
 Anonymous. About the editors. *Annals of the History of Computing*, 10(1):3–6, January/March 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1003.pdf>; <http://www.computer.org/annals/an1988/a1003abs.htm>.
- [Ano88b] **Anonymous:1988:ERH**  
 Anonymous. Errata: Reviews: Hartree: Calculating Machines: Recent and Prospective Developments and Their Impact on Mathematical Physics and Calculating Instruments and Machines, 10(1) 93. *Annals of the History of Computing*, 10(3):234, July/September 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a3234.pdf>; <http://www.computer.org/annals/an1988/a3234abs.htm>. See [AWL<sup>+</sup>88].
- [Ano88c] **Anonymous:1988:IV**  
 Anonymous. Index, volume 10, 1988/89. *Annals of the History of Computing*, 10(4):423–444, October/December 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4423.pdf>; <http://www.computer.org/annals/an1988/a4423abs.htm>.
- [Ano88d] **Anonymous:1988:RPM**  
 Anonymous. Review: P. Masani, ed.: Norbert Wiener: Collected Works with Commentaries. *Annals of the History of Computing*, 10(1): 81–83, 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1080.pdf>; <http://www.computer.org/annals/an1988/a1080abs.htm>.
- [Ano88e] **Anonymous:1988:TYA**  
 Anonymous. Ten year author index. *Annals of the History of*

*Computing*, 10(4):407–410, October/December 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4407> [Ano88i] pdf; <http://www.computer.org/annals/an1988/a4407abs>. htm.

**Anonymous:1988:TYIa**

[Ano88f] Anonymous. Ten year index to self-study questions and answers. *Annals of the History of Computing*, 10(4):416–419, October/December 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4416> [Ano89a] pdf; <http://www.computer.org/annals/an1988/a4416abs>. htm.

**Anonymous:1988:TYIb**

[Ano88g] Anonymous. Ten year index to volume indices. *Annals of the History of Computing*, 10(4):420, October/December 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4420>. [Ano89b] pdf; <http://www.computer.org/annals/an1988/a4420abs>. htm.

**Anonymous:1988:TYS**

[Ano88h] Anonymous. Ten year subject index. *Annals of the History of Computing*, 10(4):411–415, October/December 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4411> [Ano89c] pdf; <http://www.computer.org/annals/an1988/a4411abs>. htm.

<http://www.computer.org/annals/an1988/a4411abs>. htm.

**Anonymous:1988:TYT**

Anonymous. Ten year tables of contents. *Annals of the History of Computing*, 10(4):383–406, October/December 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4383>. pdf; <http://www.computer.org/annals/an1988/a4383abs>. htm.

**Anonymous:1989:Ca**

Anonymous. Contributors. *Annals of the History of Computing*, 11(3):164, July/September 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3164>. pdf; <http://www.computer.org/annals/an1989/a3164abs>. htm.

**Anonymous:1989:Cc**

Anonymous. Contributors. *Annals of the History of Computing*, 11(4):241–242, October/December 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4241>. pdf; <http://www.computer.org/annals/an1989/a4241abs>. htm.

**Anonymous:1989:HCF**

Anonymous. History of computing in France. *Annals*

- of the *History of Computing*, 11(4):237–240, October/December 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4237.pdf>; <http://www.computer.org/annals/an1989/a4237abs.htm>. [Ano91b]
- [Ano89d] Anonymous. Index to volume 11, 1989. *Annals of the History of Computing*, 11(4):337, 339–354, October/December 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4337.pdf>; <http://www.computer.org/annals/an1989/a4337abs.htm>. [Ard86]
- [Ano90] Anonymous. Index to volume 12. *Annals of the History of Computing*, 12(4):297, 299–309, October/December 1990. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4297.pdf>; <http://www.computer.org/annals/an1990/a4297abs.htm>. [ARE<sup>+</sup>87]
- [Ano91a] Anonymous. Answers to self-study questions. *Annals of the History of Computing*, 13(2):234, April/June 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2228.pdf>; <http://www.computer.org/annals/an1991/a2228abs.htm>. [Anonymous:1991:ASSb]
- [Anonymous:1989:IV] Anonymous. Answers to self-study questions. *Annals of the History of Computing*, 13(4):369, October/December 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a4358.pdf>; <http://www.computer.org/annals/an1991/a4358abs.htm>. [Arden:1986:GEC]
- [Arden:1986:GEC] Bruce Arden. GAT: An early compiler and operating system. *Annals of the History of Computing*, 8(1):56–58, January/March 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1056.pdf>; <http://www.computer.org/annals/an1986/a1056abs.htm>. [Aspray:1987:RMM]
- [Aspray:1987:RMM] William Aspray, Terry S. Reynolds, H. A. Evesham, K. W. Smillie, and David E. Rowe. Reviews: McMahon: The Making of a Profession: A Century of Electrical Engineering in America; d’Ocagne: Le Calcul Simplifié: Graphical and Mechanical Methods for Simplifying Calculations; Williams (ed.): Looking Back to Tomorrow: Reflections on Twenty-five Years of Comput-

- ers in New Zealand; Richten-  
hagen: Carl Runge (1856–1927):  
Von der reinen Mathematik zur  
Numerik; other literature. *Annals of the History of Computing*, 9(3/4):373–381, July/September 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3373.pdf>; <http://www.computer.org/annals/an1987/a3373abs.htm>. [Asc83]
- Armer:1980:SEC**
- [Arm80] Paul Armer. SHARE — a eulogy to cooperative effort. *Annals of the History of Computing*, 2(2):122–129, April/June 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a2122.pdf>; <http://www.computer.org/annals/an1980/a2122abs.htm>. Foreword by M. I. Bernstein. [Asi64]
- Armer:1983:DCR**
- [Arm83] Paul Armer. 11. the Defense Calculator at the Rand Corporation. *Annals of the History of Computing*, 5(2):202, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2202a.pdf>; <http://www.computer.org/annals/an1983/a2202aabs.htm>. [Asi72]
- Albers:1982:BCD**
- [AS82] Donald J. Albers and Lynn Arthur Steen. Biographies: a conversation with Don Knuth. *Annals of the History of Computing*, 4(3):257–274, July/September 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3257.pdf>; <http://www.computer.org/annals/an1982/a3257abs.htm>. [Ascher:1983:LNS]
- Marcia Ascher. The logical-numerical system of Inca quipus. *Annals of the History of Computing*, 5(3):268–278, July/September 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3268.pdf>; <http://www.computer.org/annals/an1983/a3268abs.htm>. [Asimov:1964:ABE]
- Isaac Asimov. *Asimov's biographical encyclopedia of science and technology; the living stories of more than 1000 great scientists from the age of Greece to the space age, chronologically arranged*. Doubleday, New York, NY, USA, 1964. x + 662 pp. LCCN Q141 .A74. [Asimov:1972:ABE]
- Isaac Asimov. *Asimov's biographical encyclopedia of science and technology; the lives and achievements of 1195 great scientists from ancient times to the present, chronologically arranged*. Doubleday, New York, NY, USA, new revised edition,

1972. xxviii + 805 pp. LCCN Q141 .A74 1972.

**Asimov:1982:ABE**

[Asi82]

Isaac Asimov. *Asimov's biographical encyclopedia of science and technology: the lives and achievements of 1510 great scientists from ancient times to the present chronologically arranged*. Doubleday, New York, NY, USA, second edition, 1982. ISBN 0-385-17771-2. xxxv + 941 + [24] pp. LCCN Q141 .A74 1982 11 Ref. US\$24.95 (est.).

**Aspray:1980:MCC**

[Asp80]

William F. Aspray. *From mathematical constructivity to computer science: Alan Turing, John von Neumann, and the origins of computer science in mathematical logic*. Thesis (Ph.D.), University of Wisconsin-Madison, Madison, WI, USA, 1980. v + 443 pp.

**Aspray:1985:STF**

[Asp85a]

William Aspray. Should the term *Fifth Generation Computers* be banned? *Journal of Computers in Mathematics and Science Teaching*, ??(??): 36-38, Spring 1985. CODEN JCMTDV. ISSN 0731-9258.

**Aspray:1985:SCI**

[Asp85b]

William F. Aspray. The scientific conceptualization of information: a survey. *Annals of the History of Computing*, 7(2):117-140, April/June 1985. CODEN AH-COE5. ISSN 0164-1239. URL

<http://dlib.computer.org/an/books/an1985/pdf/a2117.pdf>; <http://www.computer.org/annals/an1985/a2117abs.htm>.

**Aspray:1986:IDC**

[Asp86]

William Aspray. International diffusion of computer technology, 1945-1955. *Annals of the History of Computing*, 8(4):351-360, October/December 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4351.pdf>; <http://www.computer.org/annals/an1986/a4351abs.htm>.

**Aspray:1987:ABS**

[Asp87]

William Aspray. An annotated bibliography of secondary sources on the history of software. *Annals of the History of Computing*, 9(3/4):291-343, July/September 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3291.pdf>; <http://www.computer.org/annals/an1987/a3291abs.htm>.

**Aspray:1988:RTY**

[Asp88]

William Aspray. Reviews: Ten years of Annals reviews. *Annals of the History of Computing*, 10(4):365-375, October/December 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4365b.pdf>.

- pdf; <http://www.computer.org/annals/an1988/a4365babs.htm>.
- [Asp89a] William Aspray. Discussion: John von Neumann — a case study of scientific creativity. *Annals of the History of Computing*, 11(3):165–169, July/September 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3165.pdf>; <http://www.computer.org/annals/an1989/a3165abs.htm>.
- [Asp89b] William Aspray. John von Neumann’s contributions to computing and computer science. *Annals of the History of Computing*, 11(3):189–195, July/September 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3189.pdf>; <http://www.computer.org/annals/an1989/a3189abs.htm>.
- [Asp90a] William Aspray. Back to basics: The stored program concept. *IEEE Spectrum*, 27(9):51, September 1990. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Asp90b] William Aspray. *Computing before computers*. Iowa State University Press, Ames, IA, USA, 1990. ISBN 0-8138-0047-1. ix + x + 266 pp. LCCN QA76 .C5834 1990.
- [Asp90c] William Aspray. *John von Neumann and the Origins of Modern Computing*. History of computing. MIT Press, Cambridge, MA, USA, 1990. ISBN 0-262-01121-2. xvii + 376 pp. LCCN QA76.5 .A77446 1990.
- [Asp90d] William Aspray. The origins of John von Neumann’s Theory of Automata. In Glimm et al. [GIS90], pages 289–309. ISBN 0-8218-1487-7. LCCN QA29 .V66 L44 1990.
- [ASS87] William Aspray, K. W. Smillie, and Nancy Stern. Reviews: Pebbles to Computers. The Thread; The Calculating Passion of Ada Byron; other literature. *Annals of the History of Computing*, 9(2):214–217, April/June 1987. CODEN AH-COE5. ISSN 0164-1239. URL

**Aspray:1989:DJN****Aspray:1990:JNO****Aspray:1989:JNC****Aspray:1990:OJN****Aspray:2000:IAS****Aspray:1990:BBS****Aspray:1987:RPC****Aspray:1990:CBC**



- <http://dlib.computer.org/an/books/an1987/pdf/a2214.pdf>; <http://www.computer.org/annals/an1987/a2214abs.htm>. [Aue84]
- [Ata82] John V. Atanasoff. Computing machine for the solution of large systems of linear algebraic equations (1940). In Randell [Ran82], pages 315–335. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Ata84] John Vincent Atanasoff. Advent of electronic digital computing. *Annals of the History of Computing*, 6(3):229–282, July/September 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a3229.pdf>; <http://www.computer.org/annals/an1984/a3229abs.htm>. Foreword by Gordon Bell.
- [ATF<sup>+</sup>88] Eddie M. Ashmore, Erwin Tomash, Aaron Finerman, Walter M. Carlson, Jolanda L. von Hagen, and Bernie Galler. Letters of congratulations. *Annals of the History of Computing*, 10(4):240–242, October/December 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4240.pdf>; <http://www.computer.org/annals/an1988/a4240abs.htm>. [Aue86b]
- [Aue85] Isaac L. Auerbach. Eloge: Niels Ivar Bech, 1920–1975. *Annals of the History of Computing*, 6(4):332–334, October/December 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4332.pdf>; <http://www.computer.org/annals/an1984/a4332abs.htm>.
- [Aue86a] Isaac L. Auerbach. Eloge: Dov Chevion, 1917–1983. *Annals of the History of Computing*, 7(1):4–6, January/March 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1004.pdf>; <http://www.computer.org/annals/an1985/a1004abs.htm>.
- [Aue86b] Isaac L. Auerbach. Harry H. Goode, June 30, 1909–October 30, 1960. *Annals of the History of Computing*, 8(3):257–260, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3257.pdf>; <http://www.computer.org/annals/an1986/a3257abs.htm>.
- [Aue86c] Isaac L. Auerbach. The start of IFIP — personal recollection.

- tions. *Annals of the History of Computing*, 8(2):180–192, April/June 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a2180.pdf>; <http://www.computer.org/annals/an1986/a2180abs.htm>. [AW82]
- [Aug84] Stan Augarten. *Bit by bit: an illustrated history of computers*. Ticknor and Fields, New York, NY, USA, 1984. ISBN 0-89919-268-8 (hardcover), 0-89919-302-1 (paperback). 324 pp. LCCN QA76.17 .A94 1984. US\$29.85 (hardcover), US\$17.95 (paperback). [AW89]
- [Aus81] Geoffrey D. Austrian. Anecdotes: The Machine that Carried IBM into the Electronics Business. *Annals of the History of Computing*, 3(2):186–188, April/June 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a2186.pdf>; <http://www.computer.org/annals/an1981/a2186abs.htm>. [Austrian:1981:AMC]
- [Aus82] Geoffrey D. Austrian. *Herman Hollerith — Forgotten Giant of Information Processing*. Columbia University Press, New York, NY, USA, 1982. ISBN 0-231-05146-8. xvi + 418 pp. LCCN QA76.2.H64 .A97. [Austrian:1982:HHF]
- [Aspray:1982:MRP] William F. Aspray and Virginia C. Walker. Meetings in retrospect: Pioneer Day, NCC '82: History of the Stored-Program Concept; The 25th Anniversary of FORTRAN. *Annals of the History of Computing*, 4(4):358–367, October/December 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a4358.pdf>; <http://www.computer.org/annals/an1982/a4358abs.htm>.
- [Aspray:1989:RSA] William Aspray and Eric A. Weiss. Reviews: Smith and Alexander: Fumbling the Future: How Xerox Invented, then Ignored the First Personal Computer; Nash: A History of Scientific Computation. *Annals of the History of Computing*, 11(3):230–232, July/September 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3230.pdf>; <http://www.computer.org/annals/an1989/a3230abs.htm>.
- [Aspray:1988:RSP] William Aspray, Eric A. Weiss, A. D. Booth, K. W. Smillie, Henry Lowood, James W. Cortada, and Shane Greenstein. Reviews: Slater: Portraits in Silicon; Caddes: Portraits of Success, impressions of Silicon Val-

ley Pioneers; King (ed.): Machine Translation Today: The State of the Art; The Computer; Association for Computing Machinery: The ACM History of Personal Workstations Conference: January 9 & 10, 1986, Palo Alto, California; Beniger: The Control Revolution: Technological and Economic Origins of the Information Society Flamm: Targeting the Computer, Government Support and International Competition. *Annals of the History of Computing*, 10(2):144–153, April/June 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a2144.pdf>; <http://www.computer.org/annals/an1988/a2144abs.htm>.

**Aspray:1988:RCD**

[AWL<sup>+</sup>88]

William Aspray, Maurice V. Wilkes, Albert C. Lewis, Greg Mellen, Harold Chucker, Robert V. D. Campbell, Wendy Wilkins, G. J. Tee, Ernest Braun, and Arthur L. Norberg. Reviews: Carpenter and Doran (eds.): A. M. Turing's ACE Report of 1946 and Other Papers; Masani (ed.): Norbert Wiener: Collected Works with Commentaries; Kozaczuk: Enigma: How the German Machine Cipher Was Broken and How It Was Read by the Allies in World War Two; Worthy: William C. Norris: Portrait of a Maverick; Harvard Computation Laboratory: A Manual of Operation for

[Bab82a]

[Bab82b]

the Automatic Sequence Controlled Calculator; Proceedings of a Symposium on Large-Scale Digital Calculating Machinery; Gardner: The Mind's New Science: A History of the Cognitive Revolution; Hartree: Calculating Machines: Recent and Prospective Developments and Their Impact on Mathematical Physics and Calculating Instruments and Machines; McLean and Rowland: The Inmos Saga; Pennings and Buifendam (eds.): New Technology as Organizational Innovation: The Development and Diffusion of Microelectronics; other literature. *Annals of the History of Computing*, 10(1):80–97, January/March 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1080.pdf>; <http://www.computer.org/annals/an1988/a1080abs.htm>. See minor erratum [Ano88b]: Hartree as a mathematical physicist, not a physical chemist.

**Babbage:1982:MPC**

Charles Babbage. On the mathematical powers of the Calculating Engine (1837). In Randell [Ran82l], pages 19–54. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.

**Babbage:1982:BAE**

H. P. Babbage. Babbage's Analytical Engine (1910). In Randell [Ran82l], pages 67–

71. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Bac79] John Backus. The history of FORTRAN I, II, and III. *Annals of the History of Computing*, 1(1):21–37, July/September 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1021.pdf>; <http://www.computer.org/annals/an1979/a1021abs.htm>. [Bac86]
- [Bac80] John Backus. Programming in America in the 1950s: Some personal impressions. In Metropolis et al. [MHR80], pages 125–135. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976. [Bak83]
- [Bac84a] John Backus. Afterword. *Annals of the History of Computing*, 6(1):26–27, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1015.pdf>; <http://www.computer.org/annals/an1984/a1015abs.htm>. [Bar87]
- [Bac84b] John Backus. Early days of FORTRAN. *Annals of the History of Computing*, 6(1):15, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1015.pdf>; <http://www.computer.org/annals/an1984/a1015abs.htm>. [Backus:1984:EDF]
- G. L. Bach. A computer for Carnegie. *Annals of the History of Computing*, 8(1):39–41, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1039.pdf>; <http://www.computer.org/annals/an1986/a1039abs.htm>. [Bach:1986:CC]
- C. L. Baker. 5. the 701 at Douglas, Santa Monica. *Annals of the History of Computing*, 5(2):187–193, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2187.pdf>; <http://www.computer.org/annals/an1983/a2187abs.htm>. [Baker:1983:DSM]
- R. S. Barton. New approach to the functional design of a digital computer. *Annals of the History of Computing*, 9(1):11–15, January/March 1987. CODEN AH-

- COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1011.pdf>; <http://www.computer.org/annals/an1987/a1011abs.htm>.
- [Bas82] Charles J. Bashe. The SSEC in historical perspective. *Annals of the History of Computing*, 4(4):296–312, October/December 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a4296.pdf>; <http://www.computer.org/annals/an1982/a4296abs.htm>.
- [Bas83] C. J. Bashe. Comments, queries, and debate: The IBM 7080. *Annals of the History of Computing*, 5(1):74, January/March 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a1074.pdf>; <http://www.computer.org/annals/an1983/a1074abs.htm>.
- [Bau80] Friedrich L. Bauer. Between Zuse and Rutishauser — the early development of digital computing in Central Europe. In Metropolis et al. [MHR80], pages 505–524. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- [Bau81] Claude Baum. *The system builders: the story of SDC*. System Development Corp., Santa Monica, CA, USA, 1981. ISBN 0-916368-02-5. ix + 302 + [80] pp. LCCN HD9696.C64 S83.
- [Bau86] Joan Baum. *The calculating passion of Ada Byron*. Archon Books, Hamden, Conn., 1986. ISBN 0-208-02119-1. xix + 133 + [12] pp. LCCN QA29.L72 B381 1986.
- [Bau00] Friedrich L. Bauer. The Plankalkül of Konrad Zuse revisited. In Rojas and Hashagen [RH00], pages 277–293. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.

**Bashe:1982:SHP****Baum:1981:SBS****Baum:1986:CPA****Bashe:1983:CQD****Bauer:1990:CPS****Bauer:1980:BZR****Bauer:2000:PKZ**

- Burks:1981:EFG**
- [BB81] Arthur W. Burks and Alice R. Burks. The ENIAC: First general-purpose electronic computer. *Annals of the History of Computing*, 3(4):310–389, October/December 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a4310.pdf>; <http://www.computer.org/annals/an1981/a4310abs.htm>. See comments [Ran81, BB82, Phe82]. [BBB59]
- Burks:1982:CEA**
- [BB82] Arthur W. Burks and Alice R. Burks. Comment on ENIAC article: Author's reply. *Annals of the History of Computing*, 4(3):285–287, July/September 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3284.pdf>; <http://www.computer.org/annals/an1982/a3284abs.htm>.
- Burks:1988:FEC**
- [BB88] Alice R. (Alice Rowe) Burks and Arthur W. (Arthur Walter) Burks. *The first electronic computer: the Atanasoff story*. University of Michigan Press, Ann Arbor, MI, USA, 1988. ISBN 0-472-10090-4. xii + 387 pp. LCCN QA76.5 .B8251 1988. US\$30.00.
- Burks:1991:CQD**
- [BB91] Alice R. Burks and Arthur W. Burks. Comments, queries, and debate: Atanasoff award. *Annals of the History of Computing*, 13(3):308, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3306.pdf>; <http://www.computer.org/annals/an1991/a3306abs.htm>.
- Brooks:1959:PDB**
- Frederick P. Brooks, Jr., Gerrit A. Blaauw, and Werner Buchholz. Processing data in bits and pieces. *IRE Transactions on Electronic Computers*, EC-8(2):118–124, June 1959. CODEN IRELAO. ISSN 0367-9950. URL <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5219512>. This paper contains on page 121 the first published reference to the term “byte”. An article of the same title appears in “Information Processing, Proceedings of the International Conference on Information Processing, UNESCO, Paris, 15–20 June 1959”, pp. 375–381, 1959. From [Buc62, page 40]: “Byte denotes a group of bits used to encode a character, or the number of bits transmitted in parallel to and from input-output units. A term other than character is used here because a given character may be represented in different applications by more than one code, and different codes may use different numbers of bits (i.e., different byte sizes). In

input-output transmission the grouping of bits may be completely arbitrary and have no relation to actual characters. (The term is coined from bite, but respelled to avoid accidental mutation to bit.)” [BC90]

**Barton:1987:DBB**

[BBC+87] Robert S. Barton, Henri Bercé, George A. Collins, Bobby A. Creech, David M. Dahm, Benjamin A. Dent, V. James Ford, Bernard A. Galler, John E. S. Hale, Erwin A. Hauck, Joseph T. Hootman, Paul D. King, Norman L. Kreuder, William R. Lonergan, Duncan MacDonald, F. Bradley MacKenzie, Clark Oliphint, Ralph Pearson, Robert F. Rosin, Lloyd D. Turner, and Richard Waychoff. Discussion: The Burroughs B 5000 in retrospect. *Annals of the History of Computing*, 9(1):37–92, January/March 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1037.pdf>; <http://www.computer.org/annals/an1987/a1037abs.htm>.

**Blohm:1986:PCT**

[BBS86] Hans (Hans-L.) Blohm, Stafford Beer, and David T. Suzuki. *Pebbles to computers: the thread*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1986. ISBN 0-19-540536-6. 112 pp. LCCN QA76.17 .B571 1986.

**Buchholz:1990:CQDc**

Werner Buchholz and Gregory D. Crowe. Comments, queries, and debate: Soviet BESM Computers. *Annals of the History of Computing*, 12(4):286, October/December 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4286.pdf>; <http://www.computer.org/annals/an1990/a4286abs.htm>. See [Luk90].

**Bromley:1983:RFM**

[BCKS+83] Allan G. Bromley, Martin Campbell-Kelly, K. W. Smillie, Eric A. Weiss, Saul Rosen, and Cipher A. Deavours. Reviews: O. I. Franksen: Mr. Babbage, the Difference Engine, and the Problem of Notation: An Account of the Origin of Recursiveness and Conditionals in Computer Programming; H. Lukoff: from Dits to Bits; I. Asimov: Asimov’s Biographical Encyclopedia of Science and Technology; J. Futrelle: Thinking Machine; R. M. Hord: The Iliac IV; C. H. Meyer and S. M. Matyas: Cryptography; T. J. Peters and R. H. Waterman: In Search of Excellence; J. W. Stokes: 70 Years of Radio Tubes and Valves; G. Welchman: The Hut Six Story; capsule reviews. *Annals of the History of Computing*, 5(4):411–427, October/December 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/>

an/books/an1983/pdf/a4411.pdf; <http://www.computer.org/annals/an1983/a4411abs.htm>. [BDH90]

**Blum:1990:HMI**

[BD90] Bruce I. Blum and K. A. Duncan, editors. *A History of Medical Informatics*. ACM Press history series. Addison-Wesley, Reading, MA, USA, 1990. ISBN 0-201-50128-7. xxx + 455 pp. LCCN W 26.5 A184c 1987a. Proceedings of the ACM Conference on the History of Medical Informatics held at the National Library of Medicine, Bethesda, Maryland, Nov. 5-6, 1987; sponsored by the Association for Computing Machinery, Special Interest Group on Biomedical Computing.

**Buchholz:1991:CQDa**

[BDA91] Werner Buchholz, Philip H. Dorn, and Paul Armer. Comments, queries, and debate: Correction to “Early Computer User Groups”, by Herbert S. Bright, Vol. 12, No. 1, 1990; A Further Correction to “Early Computer User Groups”, by Herbert S. Bright, Vol. 12, No. 1, 1990. *Annals of the History of Computing*, 13(2):230–231, April/June 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2230.pdf>; <http://www.computer.org/annals/an1991/a2230abs.htm>. [Bei75] See [TBB90].

**Buchholz:1990:CQDb**

Werner Buchholz, Donald Watts Davies, and Mark Halpern. Comments, queries, and debate: Babbage’s friend; errors in the FORTRAN issue. *Annals of the History of Computing*, 12(2):147, April/June 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2147a.pdf>; <http://www.computer.org/annals/an1990/a2147aabs.htm>.

**Buchholz:1987:CQDb**

[BEG<sup>+</sup>87] Werner Buchholz, Ralph Erskine, Herb Grosch, William Aspray, J. A. N. Lee, and Paul M. McConnell. Comments, queries, and debate: Marian Rejewski and the chronology of Enigma; early IBM computer conferences; the computing scene 1945–1955: Another perspective; response; the ENIAC collections; response to query on hexadecimal notation. *Annals of the History of Computing*, 9(3/4):369–373, July/September 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3369.pdf>; <http://www.computer.org/annals/an1987/a3369abs.htm>. See original query on hexadecimal notation [BRG<sup>+</sup>87].

**Beika:1975:HOM**

Minoru Beika. *History of Office Mechanization in Japan*.



- From Business Mechanization to the Automation of Management.* Nippon Keiei Shuppankai, Tokyo, Japan, 1975. 326 pp. [Ben83]
- [Bem84] **Bemer:1984:CPF**  
Robert W. Bemer. Computing prior to FORTRAN. *Annals of the History of Computing*, 6(1):16–18, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1015.pdf>; <http://www.computer.org/annals/an1984/a1015abs.htm>. [Ben86]
- [Bem86] **Bemer:1986:NM**  
R. W. Bemer. Nearly 650 memories of the 650. *Annals of the History of Computing*, 8(1):66–69, January/March 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1066.pdf>; <http://www.computer.org/annals/an1986/a1066abs.htm>. [Ben91]
- [Bem87] **Bement:1987:AB**  
Ken T. Bement. Announcing the B 5000. *Annals of the History of Computing*, 9(1):8–9, January/March 1987. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1008.pdf>; <http://www.computer.org/annals/an1987/a1008abs.htm>. [Ber84]
- Benington:1983:PLC**  
Herbert D. Benington. Production of large computer programs. *Annals of the History of Computing*, 5(4):350–361, October/December 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4350.pdf>; <http://www.computer.org/annals/an1983/a4350abs.htm>.
- Beniger:1986:CRT**  
James R. (James Ralph) Beniger. *The control revolution: technological and economic origins of the information society.* Harvard University Press, Cambridge, MA, USA, 1986. ISBN 0-674-16985-9. x + 493 pp. LCCN HM258 .B45 1986.
- Bennett:1991:IIM**  
Stuart Bennett. The industrial instrument — master of industry, servant of management: Automatic control in the process industries, 1900–1940. *Technology and Culture*, 32(?):69–81, January 1991. CODEN TECUA3. ISSN 0040-165X (print), 1097-3729 (electronic).
- Bernstein:1984:TDA**  
Jeremy Bernstein. *Three degrees above zero: Bell Labs in the information age.* C. Scribner's, New York, NY, USA, 1984. ISBN 0-684-18170-3. xiii + 241 + [8] pp. LCCN T178.B45 B47 1984. US\$17.95. Portions of

this book originally appeared in the New Yorker.

**Berry:1986:CEB**

- [Ber86] Jean R. Berry. Clifford Edward Berry, 1918–1963: His role in early computers. *Annals of the History of Computing*, 8(4):361–369, October/December 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4361.pdf>; <http://www.computer.org/annals/an1986/a4361abs.htm>.

**Bernstein:1987:TDA**

- [Ber87] Jeremy Bernstein. *Three degrees above zero: Bell Laboratories in the information age*. Cambridge University Press, Cambridge, UK, 1987. ISBN 0-521-32983-3. xiii + 241 p. + 4 pp. LCCN T178.B45B47 1987. Portions of this book originally published in the New Yorker.

**Baker:1982:AAB**

- [BFB82] C. L. Baker, Richard P. Feynman, and Bernice Brode. Anecdotes: The Adventures of a Blunder 9; Reminiscences of Los Alamos. *Annals of the History of Computing*, 4(1):60–64, January/March 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1060.pdf>; <http://www.computer.org/annals/an1982/a1060abs.htm>.

[BG88]

**Buchholz:1988:CQDd**

Werner Buchholz and Herbert R. J. Grosch. Comments, queries, and debate: Early Italian computing. *Annals of the History of Computing*, 10(4):365, October/December 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4365a.pdf>; <http://www.computer.org/annals/an1988/a4365aabs.htm>.

**Buchholz:1991:CQDb**

[BGH<sup>+</sup>91]

Werner Buchholz, Herb Grosch, Pierre Hillion, Michael F. Weisbard, Alice R. Burks, Arthur W. Burks, and J. A. N. Lee. Comments, queries, and debate: Early computing courses; computing in the French Army; corrections to volume 12, number 4; Atanasoff award; reply to Burks and Burks on the Atanasoff award. *Annals of the History of Computing*, 13(3):306–308, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3306.pdf>; <http://www.computer.org/annals/an1991/a3306abs.htm>.

**Buchholz:1988:CQDb**

[BGR88]

Werner Buchholz, Herb Grosch, and Saul Rosen. Comments, queries, and debate: Was the first microcomputer built in France?; marketing the Bur-

- roughs 5000 internationally; the Burroughs 5000 discussion. *Annals of the History of Computing*, 10(2):142–144, April/June 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a2142.pdf>; <http://www.computer.org/annals/an1988/a2142abs.htm>. [BH89a]
- [BGvN82] Arthur W. Burks, Herman H. Goldstine, and John von Neumann. Preliminary discussion of the logical design of an electronic computing instrument (1946). In Randell [Ran82], pages 399–413. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [BH81] C. L. Baker and Grace Murray Hopper. Anecdotes: Stories from the HOPL Banquet: Dear John; meeting JOSS; the first bug; SOAP assembler; debugging. *Annals of the History of Computing*, 3(3):283–286, July/September 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a3283.pdf>; <http://www.computer.org/annals/an1981/a3283abs.htm>. [BH89c]
- [BH88] H. W. (Harry Wilmot) Buxton and Anthony Hyman. *Memoir of the life and labours of the late Charles Babbage Esq., F.R.S.* Charles Babbage Institute reprint series for the history of computing ; v. 13. Tomash, Los Angeles, CA, USA, 1988. ISBN 0-262-02269-9. xix + 401 pp. LCCN QA29.B2 B891 1988.
- Babbage:1989:SRS**
- Charles Babbage and Anthony Hyman. *Science and reform: selected works of Charles Babbage*. Cambridge University Press, Cambridge, UK, 1989. ISBN 0-521-34311-9. vii + 356 pp. LCCN QA3 .B2 1989.
- Brink:1989:PCB**
- Jean R. Brink and C. Roland Haden. Prologue: The computer and the brain: An international symposium in commemoration of John von Neumann (1903–1957). *Annals of the History of Computing*, 11(3):161–163, July/September 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3161.pdf>; <http://www.computer.org/annals/an1989/a3161abs.htm>.
- Brink:1989:IET**
- Jean R. Brink and Roland Haden. Interviews with Edward Teller and Eugene P. Wigner. *Annals of the History of Computing*, 11(3):177–178, July/September 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3177.pdf>; <http://www.computer.org/annals/an1989/a3177abs.htm>.
- Burks:1982:PDL**
- Baker:1981:ASH**
- Buxton:1988:MLL**

- org/annals/an1989/a3177abs.htm.
- [BH89d] **Bruemmer:1989:HTC**  
 Bruce H. Bruemmer and Sheldon Hochheiser. *The high-technology company: a historical research and archival guide*. Minneapolis, MN, USA, 1989. 131 pp. Prepared under a grant from the National Historical Publications and Records Commission, Grant 87-47.
- [BHB<sup>+</sup>89] **Buchholz:1989:CQDb**  
 Werner Buchholz, Anthony Hyman, Ralf Bülow, Bernard A. Galler, and Jack Minker. Comments, queries, and debate: Babbage Studies; An Ecological Computing Machine; The University of Michigan's B-5000 Decision; ACM 20th Anniversary Meeting. *Annals of the History of Computing*, 11(3):225–229, July/September 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3225.pdf>; <http://www.computer.org/annals/an1989/a3225abs.htm>.
- [BHMU85] **Burks:1985:CEM**  
 Arthur W. Burks, Alston S. Householder, N. Metropolis, and S. M. Ulam. Comments on early Monte Carlo computations and scientific meetings. *Annals of the History of Computing*, 7(2):147–148, April/June 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a2141.pdf>; <http://www.computer.org/annals/an1985/a2141abs.htm>.
- [BHP87] **Bijker:1987:SCT**  
 Wiebe E. Bijker, Thomas Parke Hughes, and T. J. Pinch. *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*. MIT Press, Cambridge, MA, USA, 1987. ISBN 0-262-02262-1. x + 405 pp. LCCN ????. Papers of a workshop held at the University of Twente, The Netherlands, in July 1984.
- [BHW<sup>+</sup>90] **Buchholz:1990:CQDa**  
 Werner Buchholz, R. Anthony Hyman, Maurice V. Wilkes, Richard E. Smith, George T. Jacobi, Alice R. Burks, Arthur W. Burks, I. Bernard Cohen, I. O. Grattan-Guinness, S. I. Gass, and Mike Woodger. Comments, queries, and debate: Whiggism in the History of Science and the Study of the Life and Work of Charles Babbage; Whirlwind and Microprogramming; More on Wilkes, Whirlwind, and Microprogramming; Pioneer Biographies; The Atanasoff Story — A Response; Notes on Babbage, Aiken, and Bowditch; Joseph Fourier's Anticipation of Linear Programming; What Does BNF Stand for? *Annals of the History of Computing*, 12(1):62–72, January/March 1990. CODEN AH-

- COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a1062.pdf>; <http://www.computer.org/annals/an1990/a1062abs.htm>.
- [Big80] **Bigelow:1980:CDI**  
 Julian Bigelow. Computer development at the Institute for Advanced Study. In Metropolis et al. [MHR80], pages 291–310. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- [Bir80] **Birkhoff:1980:CDS**  
 Garrett Birkhoff. Computing developments 1935–1955, as seen from Cambridge, U.S.A. In Metropolis et al. [MHR80], pages 21–30. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- [Bir83] **Birkenstock:1983:PP**  
 James W. Birkenstock. Preliminary planning for the 701. *Annals of the History of Computing*, 5(2):112–114, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2112b.pdf>; <http://www.computer.org/annals/an1983/a2112babs.htm>.
- [BKM84] **Blum:1984:EWW**  
 Joseph Blum, Robert L. Kirby, and Jack Minker. Eloge: Walter W. Jacobs, 1914–1982. *Annals of the History of Computing*, 6(2):100–105, April/June 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2100.pdf>; <http://www.computer.org/annals/an1984/a2100abs.htm>.
- [BL82] **Bleackley:1982:ECA**  
 Beverley J. Bleackley and Jean LaPrairie. *Entering the computer age: the computer industry in Canada, the first thirty years*. Book Society of Canada, Agincourt, Canada, 1982. ISBN 0-7725-0015-0. x + 161 pp. LCCN HD9696.C63 C3122 1982.
- [Bla80] **Blachman:1980:CAD**  
 N. M. Blachman. Czechoslovak automatic digital computer, SAP0. *Annals of the History of Computing*, 2(4):284–??, October/December 1980. CODEN AHCOE5. ISSN 0164-1239.
- [Blo87] **Bloomfield:1987:QAI**  
 Brian P. Bloomfield. *The Question of Artificial Intelligence: Philosophical and Sociological Perspectives*. C. Helm, New

York, NY, USA, 1987. ISBN 0-7099-3957-4. xvi + 286 pp. LCCN Q335 .Q471 1987.

**Blum:1987:CPA**

[Blu87]

Bruce I. Blum, editor. *Conference proceedings: ACM Conference on the History of Medical Informatics: papers presented at the Conference, National Library of Medicine, Bethesda, Maryland, November 5–6, 1987*. ACM Press, New York, NY, USA, 1987. ISBN 0-89791-248-9. 205 pp. LCCN W 26.5 A184c 1987.

**Bennett:1981:CQD**

[BMC81]

John M. Bennett, Jack Minker, and Kenneth H. Cowan. Comments, queries, and debate: Comments on programming the Manchester Mark I; “old-timers” in 1967; more on “inventing” the first electronic digital computer. *Annals of the History of Computing*, 3(2):189–192, April/June 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a2189.pdf>; <http://www.computer.org/annals/an1981/a2189abs.htm>.

**Baron:1990:CSC**

[BMK90]

Georges-Louis Baron and Pierre-E. Mounier-Kuhn. Computer science at the CNRS and in French universities. A gradual institutional recognition. *Annals of the History of Computing*, 12(2):79–87, April/

June 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2079.pdf>; <http://www.computer.org/annals/an1990/a2079abs.htm>.

**Booth:1980:CUL**

[Boo80]

Andrew D. Booth. Computers in the University of London, 1945–1962. In Metropolis et al. [MHR80], pages 551–561. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Book:1981:F**

[Boo81]

Ronald V. Book. Foreword. *Annals of the History of Computing*, 3(1):13, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1013.pdf>; <http://www.computer.org/annals/an1981/a1013abs.htm>.

**Boucher:1989:G**

[Bou89]

Henri Boucher. Glossary. *Annals of the History of Computing*, 11(4):243–245, October/December 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4243.pdf>; <http://www.computer.org/annals/an1989/a4243abs.htm>.

- org/annals/an1989/a4243abs.htm.
- [Bou90] Henri Boucher. Informatics in the defense industry. *Annals of the History of Computing*, 12(4):227–240, October/December 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4227.pdf>; <http://www.computer.org/annals/an1990/a4227abs.htm>.
- [BP84] M. Beard and T. Pearcy. The genesis of an early stored-program computer: CSIRAC. *Annals of the History of Computing*, 6(2):106–115, April/June 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2106.pdf>; <http://www.computer.org/annals/an1984/a2106abs.htm>.
- [Bre00] Andreas Brennecke. A classification scheme for program controlled calculators. In Rojas and Hashagen [RH00], pages 53–68. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17.F57 2000.
- [BRG<sup>+</sup>87] Werner Buchholz, C. J. D. Roberts, Fred Gruenberger, Bruce H. Bruemmer, Jakob Nielson, and Paul Ceruzzi. Comments, queries, and debate: Babbage’s Difference Engine No. 1 and the production of sine tables; query on hexadecimal notation; Burroughs B 5000 oral history; DASK, the first Danish computer; Smithsonian exhibition on computers and flight. *Annals of the History of Computing*, 9(2):210–213, April/June 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a2210.pdf>; <http://www.computer.org/annals/an1987/a2210abs.htm>. See response on hexadecimal query [BEG<sup>+</sup>87].
- [Bri79] Herb Bright. FORTRAN comes to Westinghouse-Bettis, 1957. *Annals of the History of Computing*, 1(1):72–74, July/September 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1072.pdf>; <http://www.computer.org/annals/an1979/a1072abs.htm>.
- [Bri84] Herbert S. Bright. Early FORTRAN user experience. *Annals of the History of Computing*, 6(1):28–30, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1028.pdf>; <http://www.computer.org/annals/an1984/a1028abs.htm>.

- org/annals/an1984/a1028abs.htm.
- [Bro87] **Brink:1989:JNR**
- [Bri89] Jean R. Brink. John von Neumann reconsidered. *Annals of the History of Computing*, 11(3):179–181, July/September 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3179.pdf>; <http://www.computer.org/annals/an1989/a3179abs.htm>.
- [Bro81] **Brown:1981:EHL**
- [Bro81] Gordon S. Brown. Eloge: Harold Locke Hazen, 1901–1980. *Annals of the History of Computing*, 3(1):4–12, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1004.pdf>; <http://www.computer.org/annals/an1981/a1004abs.htm>.
- [Bro82] **Bromley:1982:CBA**
- [Bro82] Allan G. Bromley. Charles Babbage’s Analytical Engine, 1838. *Annals of the History of Computing*, 4(3):196–217, July/September 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3196.pdf>; <http://www.computer.org/annals/an1982/a3196abs.htm>.
- [Bro87] **Bromley:1987:EBC**
- [Bro87] Allan G. Bromley. The evolution of Babbage’s calculating engines. *Annals of the History of Computing*, 9(2):113–136, April/June 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a2113.pdf>; <http://www.computer.org/annals/an1987/a2113abs.htm>.
- [BRS<sup>+</sup>89] **Buchholz:1989:CQDa**
- [BRS<sup>+</sup>89] Werner Buchholz, Saul Rosen, Benjamin L. Schwartz, Saul I. Gass, and Caxton C. Foster. Comments, queries, and debate: The Atanasoff Story — Comment on Book Review; The Invention of Linear Programming; Comments on the History of Linear Programming; Applied Math 218. *Annals of the History of Computing*, 11(2):144–152, April/June 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a2144.pdf>; <http://www.computer.org/annals/an1989/a2144abs.htm>.
- [BS84] **Bromley:1984:CQD**
- [BS84] Allan G. Bromley and Fred R. Shapiro. Comments, queries, and debate: Origins of anti-aircraft analog computers; “The First Bug” Examined. *Annals of the History of Computing*, 6(2):163–164, April/June 1984. CODEN AH-COE5. ISSN 0164-1239. URL



<http://dlib.computer.org/an/books/an1984/pdf/a2163.pdf>; <http://www.computer.org/annals/an1984/a2163abs.htm>.

[Buc62]

**Bromley:1983:CQD**

[BSEW83] Allan G. Bromley, Richard E. Smith, Clark A. Elliott, and Eric A. Weiss. Comments, questions, and debate: What Defines a “General-Purpose” Computer?; Early ONR Publications About Computers; History of Science Centers; Information Sought on the Bell “2-B Regrettor”. *Annals of the History of Computing*, 5(3):303–306, July/September 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3303.pdf>; <http://www.computer.org/annals/an1983/a3303abs.htm>.

**Bell:1984:RRM**

[BSS84] Gordon Bell, K. W. Smillie, and Nancy Stern. Reviews: R. Moreau, The Computer Comes of Age; A. Ralston and E. D. Reilly, Jr., Encyclopedia of Computer Science and Engineering; Joel Shurkin, Engines of the Mind; capsule reviews. *Annals of the History of Computing*, 6(4):410–424, October/December 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4410.pdf>; <http://www.computer.org/annals/an1984/a4410abs.htm>.

[Buc80a]

htm. See response to Bell’s review in [Mor86].

**Buchholz:1962:PCS**

Werner Buchholz, editor. *Planning a computer system: Project Stretch*. McGraw-Hill, New York, NY, USA, 1962. xvii + 322 pp. LCCN 1876. URL <http://ed-thelen.org/comp-hist/IBM-7030-Planning-McJones.pdf>. This important book is the primary description of the influential IBM 7030 Stretch computer, written by its architects.

**Buchholz:1980:RKH**

Werner Buchholz. Reviews: K. H. Czawderna: Konrad Zuse; capsule reviews. *Annals of the History of Computing*, 2(2):187–190, April/June 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a2187.pdf>; <http://www.computer.org/annals/an1980/a2187abs.htm>.

**Buchholz:1980:RMG**

[Buc80b]

Werner Buchholz. Reviews: M. Graef: 350 Years of Computing Machines; Capsule Reviews. *Annals of the History of Computing*, 2(1):88–94, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1088.pdf>; <http://www.computer.org/annals/an1980/a1088abs.htm>. See minor corrections [Ano80c].

**Buchholz:1981:AOW**

- [Buc81] W. Buchholz. Anecdotes: Origin of the word byte. *Annals of the History of Computing*, 3(1):72, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1072a.pdf>; <http://www.computer.org/annals/an1981/a1072aabs.htm>. Historical notes: The word “byte” was first used in a published article by Brooks, Blaauw, and Buchholz in 1959 [BBB59]. The word “software” was coined by John W. Tukey [Tuk58]. The word “bit” was also coined by Tukey in 1946 at Bell Laboratories. See also [TB84].

**Buchholz:1983:NNP**

- [Buc83] Werner Buchholz. News and notices: Program Announced for Pioneer Day at 1983 NCC: [obituaries] Kurt O. Friedrichs, Frederick E. Terman, and Albert L. Williams. *Annals of the History of Computing*, 5(2):220, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2220.pdf>; <http://www.computer.org/annals/an1983/a2220abs.htm>.

**Bulow:1988:DMG**

- [Bül88] Ralf Bülow. *Denk, Maschine! Geschichten über Roboter, computer und künstliche Intelligenz*. Wilhelm Heyne, München, Ger-

many, 1988. ISBN 3-453-00780-8. 349 pp. LCCN ????

**Bulow:1990:TIS**

- [Bül90] Ralf Bülow. Three inventors — scenes from early German computing history. *Annals of the History of Computing*, 12(2):109–126, April/June 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2109.pdf>; <http://www.computer.org/annals/an1990/a2109abs.htm>.

**Burks:1980:ESC**

- [Bur80] Arthur W. Burks. From ENIAC to the stored-program computer: Two revolutions in computers. In Metropolis et al. [MHR80], pages 311–344. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Burchard:1981:NNF**

- [Bur81] Hank Burchard. News and notices: Finerman and Lee Receive ACM Awards; summer positions at Digital Computer Museum; CBI Fellowship 1982–1983; GMD activities in the history of computing; request for articles; Edwards speaks at Digital Computer Museum; exhibit of cipher machines. *Annals of the History of Com-*

- puting*, 3(4):410–413, October/December 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a4410.pdf>. [BW84]
- Burton:2000:RFM**
- [Bur00] Christopher P. Burton. Rebuilding the first Manchester computer. In Rojas and Hashagen [RH00], pages 379–386. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- Burks:2003:WIC**
- [Bur03] Alice R. Burks. *Who invented the computer?: the legal battle that changed computing history*. Prometheus Books, Amherst, NY, USA, 2003. ISBN 1-59102-034-4. 463 pp. LCCN QA76.17 .B87 1996.
- Burton:2006:WCA**
- [Bur06] Tammara Burton. *World changer: Atanasoff and the computer*. Tangra Tannakra Publishers, Sofia, Bulgaria, 2006. ISBN 954-9942-94-5 (hardcover). 271 pp. LCCN QA76.2.A75 B978 2006; TNR51661.
- Bush:1982:AM**
- [Bus82] V. Bush. Arithmetical machine (1940). In Randell [Ran82], pages 337–343. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- Brown:1984:AR**
- Gordon S. Brown and Norbert Wiener. Automation, 1955: a retrospective. *Annals of the History of Computing*, 6(4):372–383, October/December 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4372.pdf>; <http://www.computer.org/annals/an1984/a4372abs.htm>.
- Buchholz:1991:CQDc**
- [BW91] Werner Buchholz and Eric A. Weiss. Comments, queries, and debate: Free computer identification service. *Annals of the History of Computing*, 13(4):363, October/December 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a4363.pdf>; <http://www.computer.org/annals/an1991/a4363abs.htm>.
- Bullock:1983:FBCa**
- [BWC83a] Alan Bullock, R. B. Woodings, and John Cumming. *The Fontana biographical companion to modern thought*. Fontana, London, UK, 1983. ISBN 0-00-635847-0 (paperback). xxv + 867 pp. LCCN CT120 .F65 1983.
- Bullock:1983:FBCb**
- [BWC83b] Alan Bullock, R. B. Woodings, and John Cumming. *The Fontana biographical companion*

to modern thought. Collins, London, UK, 1983. ISBN 0-00-216329-2. xxv + 867 pp. LCCN CT120.F65 1983. UK£15.95. Companion volume to The Fontana dictionary of modern thought.

**Bullock:1983:TCC**

[BWC83c]

Alan Bullock, R. B. Woodings, and John Cumming. *Twentieth-century culture: a biographical companion*. Harper & Row, New York, NY, USA, 1983. ISBN 0-06-015248-6. xxx + 865 pp. LCCN CT120 .T88 1983. US\$35.00. Companion volume to The Harper dictionary of modern thought. Originally published in Great Britain under the title “The Fontana biographical companion to modern thought.”

[Cad86]

**Buchholz:1988:CQDa**

[BWK88]

Werner Buchholz, Eric A. Weiss, and Frances Coulborn Kohler. Comments, queries, and debate: IBM customer education classes; nominations sought for History of Women in Science Prize. *Annals of the History of Computing*, 10(1):99–101, January/March 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1099.pdf>; <http://www.computer.org/annals/an1988/a1099abs.htm>.

[Car86a]

**Buchholz:1988:CQDc**

[BWV<sup>+</sup>88]

Werner Buchholz, Maurice V. Wilkes, Alfred W. Van Sin-

[Car86b]

deren, C. J. Fern, Jr., and W. L. van der Poel. Comments, queries, and debate: Babbage and the Colossus; Babbage and Bowditch; Two Early European Computers; Early Dutch Computer. *Annals of the History of Computing*, 10(3):218–221, July/September 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a3218.pdf>; <http://www.computer.org/annals/an1988/a3218abs.htm>.

**Caddes:1986:PSI**

Carolyn Caddes. *Portraits of success: impressions of Silicon Valley pioneers*. William Kaufmann, Los Altos, CA, USA, 1986. ISBN 0-935382-56-9, 0-935382-57-7 (paperback). viii + 138 pp. LCCN F862.55.C14 1986. US\$40.00 (hardcover), US\$20.00 (paperback).

**Carlson:1986:ACC**

Walter M. Carlson. Anecdotes: Computing capacity. *Annals of the History of Computing*, 8(2):195–196, April/June 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a2195.pdf>; <http://www.computer.org/annals/an1986/a2195abs.htm>.

**Carlson:1986:WAI**

Walter M. Carlson. Why AFIPS invested in history. *An-*

*nals of the History of Computing*, 8(3):270–274, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3270.pdf>; <http://www.computer.org/annals/an1986/a3270abs.htm>.

**Ceruzzi:1990:RNC**

[CB90]

Paul Ceruzzi and Ralf Bülow. Reviews: Nijholt: *Computers and Languages: Theory and Practice*; Kawasaki: *The Macintosh Way*; Fang: *Tools of Communication: The Computer Story*; Otnes: *Keuffel and Esser Slide Rules*. *Annals of the History of Computing*, 12(1):72–73, January/March 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a1072.pdf>; <http://www.computer.org/annals/an1990/a1072abs.htm>.

**Ceruzzi:1990:RCB**

[CCKSS90]

Paul Ceruzzi, Martin Campbell-Kelly, Charles Susskind, and K. W. Smillie. Reviews: Ceruzzi: *Beyond the Limits: Flight Enters the Computer Age*; Staudenmaier: *Technology's Storytellers: Reweaving the Human Fabric*; Bijker, Hughes, and Pinch: *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*; Van Creveld, Martin. *Technology and*

*War: From 2000 B.C. to the Present*; Rifkin and Harrar: *The Ultimate Entrepreneur: The Story of Ken Olsen and Digital Equipment Corporation*; Time-Life Books, eds. *Understanding Computers Vol. 24: Illustrated Chronology and Index*; Lee: *Winning with People: The First 40 Years of Tektronix*; Searle: *The Bombsight War: Norden vs. Sperry*; Kruh: *Tales of Yardley: Some Sidelights to his Career*; IEEE Scientific Supercomputer Subcommittee. *The Computer Spectrum: A perspective on the Evolution of Computing*; Forester. *High-Tech Society*; *The Computer: A Hawkhill Learning Power Book*; Molina: *The Social Basis of the Microelectronics Revolution*. *Annals of the History of Computing*, 12(2):147–152, April/June 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2147b.pdf>; <http://www.computer.org/annals/an1990/a2147babs.htm>.

**Ceruzzi:1991:RBH**

[CCR<sup>+</sup>91]

Paul Ceruzzi, Martin Collins, Nathan Reingold, K. W. Smillie, and Steven Lubar. Reviews: Bruemmer and Hocheiser: *The High Technology Company: A Historical and Archival Guide*; Cortada: *Archives of Data-Processing History, a Guide to Major U.S. Collections*; Blum and Duncan: *A History of Medical Informatics*; Editor's Note:

- Vincenti book review; Vincenti: What Engineers Know and How They Know it: Analytical Studies from Aeronautical History. *Annals of the History of Computing*, 13(3):308–313, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3308.pdf>; <http://www.computer.org/annals/an1991/a3308abs.htm>. [Cer81]
- Ceruzzi:1992:RSM**
- [CDW92] Paul Ceruzzi, Philip H. Dorn, and Joyce M. Wheeler. Reviews: Simon: Models of My Life; BBC Television, The Dream Machine. *Annals of the History of Computing*, 14(3):77–80, July/September 1992. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1992/pdf/a3077.pdf>; <http://www.computer.org/annals/an1992/a3077abs.htm>. [Cer83]
- Ceruzzi:1980:NNO**
- [Cer80] Paul Ceruzzi. News and notices: Opening of Digital Computer Museum; Strachey Collection completed; anniversary of Hamming codes; CBI chooses permanent site; honorary degree awarded to Konrad Zuse. *Annals of the History of Computing*, 2(3):273–274, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3273.pdf>; <http://www.computer.org/annals/an1980/a3273abs.htm>. [Cer88]
- Ceruzzi:1981:ECK**
- Paul E. Ceruzzi. The early computers of Konrad Zuse, 1935 to 1945. *Annals of the History of Computing*, 3(3):241–262, July/September 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a3241.pdf>; <http://www.computer.org/annals/an1981/a3241abs.htm>. [Ceruzzi:1983:RPD]
- Paul E. Ceruzzi. *Reckoners: the prehistory of the digital computer, from relays to the stored program concept, 1935–1945*, volume 1 of *Contributions to the study of computer science*. Greenwood Press, 88 Post Road West, Westport, CT 06881, USA, 1983. ISBN 0-313-23382-9 (hardcover). ISSN 0734-757X. xii + 181 pp. LCCN QA76.5 .C4164 1983.
- Ceruzzi:1988:ETC**
- Paul Ceruzzi. Electronics technology and computer science, 1940–1975: a coevolution. *Annals of the History of Computing*, 10(4):257–275, October/December 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4257.pdf>; <http://www.computer.org/annals/an1988/a4257abs.htm>.

**Ceruzzi:1989:BLF**

- [Cer89] Paul E. Ceruzzi. *Beyond the limits: flight enters the computer age*. MIT Press, Cambridge, MA, USA, 1989. ISBN 0-262-03143-4, 0-262-53082-1 (paperback). xi + 270 pp. LCCN TL553 .C381 1989.

**Ceruzzi:1991:REN**

- [Cer91a] Paul Ceruzzi. Review: Editor's note: Vincenti book review. *Annals of the History of Computing*, 13(3):311–312, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3308.pdf>; <http://www.computer.org/annals/an1991/a3308abs.htm>.

**Ceruzzi:1991:WCW**

- [Cer91b] Paul E. Ceruzzi. When computers were human. *Annals of the History of Computing*, 13(3):237–244, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3237.pdf>; <http://www.computer.org/annals/an1991/a3237abs.htm>.

**Ceruzzi:2000:NNS**

- [Cer00] Paul Ceruzzi. Nothing new since von Neumann: a historian looks at computer architecture, 1945–1995. In Rojas and Hashagen [RH00], pages 195–217. ISBN 0-262-18197-5 (hardcover), 0-585-

35535-5 (electronic). LCCN QA76.17 .F57 2000.

**Cesareo:1982:RI**

- [Ces82] O. Cesareo. The relay interpolator (1946). In Randell [Ran82], pages 253–256. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.

**Crandall:1989:CRT**

- [CF89] Robert W. Crandall and Kenneth Flamm. *Changing the rules: technological change, international competition, and regulation in communications*. Brookings Institution, Washington, DC, USA, 1989. ISBN 0-8157-1596-X, 0-8157-1595-1 (paperback). xv + 424 pp. LCCN HE8731 .C471 1989. Revised papers from a conference organized by the Brookings Institution and sponsored in part by the NYNEX Corporation.

**Ceruzzi:1991:RCK**

- [CFK+91] Paul Ceruzzi, Kenneth Flamm, Peggy Aldrich Kidwell, Herbert R. J. Grosch, and John A. N. Lee. Reviews: Campbell-Kelly: ICL: A Business and Technical History; Aspray: Computing Before Computers; Watson and Petre: Father, Son & Co.; Asimov and Frenkel: Robots: Machines in Man's Image; McNeil: An Encyclopedia of the History of Technology; Byte: Fifteenth Anniversary Summit; Deavours and Kruh: The Turing Bombe: Was it Enough?; Pearcey: A History of

- Australian Computing; Aspray: The Origins of John von Neumann's Theory of Automata; Crossley and Henry: Thus Spake al-Khwarizmi: a Translation of the text of Cambridge University Library Ms. li.vi.5; Fauvel and Gerdes: African Slave and Calculating Prodigy: Bicentenary of the Death of Thomas Fuller; Marling: Maestro of Many Keyboards [brief biography of Donald Knuth]. *Annals of the History of Computing*, 13(1):111–117, January/March 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1111.pdf>; <http://www.computer.org/annals/an1991/a1111abs.htm>.
- [CH90] John N. Crossley and Alan S. Henry. Thus spake al-Khāwarizmi: a translation of the text of Cambridge University Library Ms. II.vi.5. *Historia Mathematica*, 17(2):103–131, May 1990. CODEN HIMADS. ISSN 0315-0860 (print), 1090-249X (electronic). URL <http://www.sciencedirect.com/science/article/pii/031508609090048I>.
- [Ch80] George C. Chase. History of mechanical computing machinery. *Annals of the History of Computing*, 2(3):198–226, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3198.pdf>; <http://www.computer.org/annals/an1980/a3198abs.htm>. Foreword by I. Bernard Cohen.
- [Ch83] W. W. Chandler. The installation and maintenance of Colossus. *Annals of the History of Computing*, 5(3):260–262, July/September 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3260.pdf>; <http://www.computer.org/annals/an1983/a3260abs.htm>.
- [Ch91a] Kate Charlesworth. Calculators & computers. *New Scientist*, ??(??):49, April 6, 1991. CODEN NWSCAL. ISSN 0262-4079 (print), 1364-8500 (electronic).
- [Ch91b] Kate Charlesworth. Calculators & computers — the 20th Century. *New Scientist*, ??(??):53, April 13, 1991. CODEN NWS-CAL. ISSN 0262-4079 (print), 1364-8500 (electronic).
- [Ch91c] Kate Charlesworth. Transistors. *New Scientist*, ??(??):49, April 20, 1991. CODEN NWSCAL. ISSN 0262-4079 (print), 1364-8500 (electronic).



**Chu:1980:CDA**

- [Chu80] J. C. Chu. Computer development at Argonne National Laboratory. In Metropolis et al. [MHR80], pages 345–346. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Campbell-Kelly:1980:PEE**

- [CK80a] Martin Campbell-Kelly. Programming the EDSAC: Early programming activity at the University of Cambridge. *Annals of the History of Computing*, 2(1):7–36, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1007.pdf>; <http://www.computer.org/annals/an1980/a1007abs.htm>.

**Campbell-Kelly:1980:PME**

- [CK80b] Martin Campbell-Kelly. Programming the Mark I: Early programming activity at the University of Manchester. *Annals of the History of Computing*, 2(2):130–168, April/June 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a2130.pdf>; <http://www.computer.org/annals/an1980/a2130abs.htm>.

[CK81]

htm. See minor correction [Ano80c].

**Campbell-Kelly:1981:PPA**

Martin Campbell-Kelly. Programming the Pilot ACE: Early programming activity at the National Physical Laboratory. *Annals of the History of Computing*, 3(2):133–162, April/June 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a2133.pdf>; <http://www.computer.org/annals/an1981/a2133abs.htm>. See correction supplying six missing references [Ano83l].

**Campbell-Kelly:1982:DCP**

[CK82a]

Martin Campbell-Kelly. The development of computer programming in Britain (1945 to 1955). *Annals of the History of Computing*, 4(2):121–139, April/June 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a2121.pdf>; <http://www.computer.org/annals/an1982/a2121abs.htm>.

**Campbell-Kelly:1982:NNH**

[CK82b]

Martin Campbell-Kelly. News and notices: Hammer Chairs AFIPS History Committee; ACM Symposium to Honor Church and Rosser; CBI Reprint Series; CBI Fellowship, 1983–1984; Museum Lecture Series; Annals using New CR Categories. *Annals of the History of*

- Computing*, 4(3):287–288, July/September 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3287.pdf>; <http://www.computer.org/annals/an1982/a3287abs.htm>. [CK88]
- Campbell-Kelly:1984:RAT**
- [CK84] Martin Campbell-Kelly. Review of “Alan Turing: The Enigma”, by Andrew Hodges. *Annals of the History of Computing*, 6(2):176–178, April/June 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2167.pdf>; <http://www.computer.org/annals/an1984/a2167abs.htm>. [CK89]
- Campbell-Kelly:1985:CSB**
- [CK85] Martin Campbell-Kelly. Christopher Strachey 1916–1975: a biographical note. *Annals of the History of Computing*, 7(1):19–42, January/March 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1019.pdf>; <http://www.computer.org/annals/an1985/a1019abs.htm>. [CK00]
- Campbell-Kelly:1987:DCN**
- [CK87] Martin Campbell-Kelly. Data communications at the National Physical Laboratory (1965–1975). *Annals of the History of Computing*, 9(3/4):221–247, July/September 1987. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3221.pdf>; <http://www.computer.org/annals/an1987/a3221abs.htm>. [CK88]
- Campbell-Kelly:1988:CBT**
- Martin Campbell-Kelly. Charles Babbage’s table of logarithms (1827). *Annals of the History of Computing*, 10(3):159–169, July/September 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a3159.pdf>; <http://www.computer.org/annals/an1988/a3159abs.htm>. [CK89]
- Campbell-Kelly:1989:IBT**
- Martin Campbell-Kelly. *ICL: a business and technical history*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1989. ISBN 0-19-853918-5. xii + 409 + [36] pp. LCCN HD9696 .C641 1989. US\$37.25.
- Campbell-Kelly:2000:PPE**
- Martin Campbell-Kelly. Past into present: the EDSAC simulator. In Rojas and Hashagen [RH00], pages 397–416. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- Campbell-Kelly:1983:RRH**
- [CKSW83] Martin Campbell-Kelly, K. W. Smillie, and M. R. Williams. Reviews: R. Hull: *The Unfortunate Murderer*; B. J. Bleackley and J. LaPrairie: *Entering the Computer Age*; H. Zemanek:

- Al-Khorezmi; capsule reviews. *Annals of the History of Computing*, 5(3):310–316, July/September 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3310.pdf>; <http://www.computer.org/annals/an1983/a3310abs.htm>.
- [CKW85] **Campbell-Kelly:1985:MSL**  
 Martin Campbell-Kelly and Michael R. Williams. *The Moore School lectures: theory and techniques for design of electronic digital computers*. Charles Babbage Institute reprint series for the history of computing ; v. 9. Tomash Publishers, Los Angeles, CA, USA, 1985. ISBN 0-262-03109-4. xxxiv + 568 + [2] pp. LCCN QA76.5 .M581 1985. Revised edition of: Theory and techniques for design of electronic digital computers. 1947–1948.
- [CL05] **Case:2005:CWM**  
 Bettye Anne Case and Anne M. Leggett, editors. *Complexities: women in mathematics*. Princeton University Press, Princeton, NJ, USA, 2005. ISBN 0-691-11462-5. xix + 412 + 22 pp. LCCN QA27.5 .C66 2005. URL <http://www.loc.gov/catdir/toc/fy0612/2004048843.html>; <http://www.loc.gov/catdir/enhancements/fy0668/2004048843-b.html>; <http://www.loc.gov/catdir/enhancements/fy0668/2004048843-d.html>.
- [CLBdB89] **Ceruzzi:1989:RNB**  
 Paul Ceruzzi, John A. N. Lee, Susan A. Bradley, and Donald deB. Beaver. Reviews: a new beginning; Reid: Computers and Chips; Howell: John von Neumann, Inventors and Discoverers; Lundstrom: A Few Good Men from Univac; Perrolle: Computers and Social Change: Information, Property, and Power. *Annals of the History of Computing*, 11(4):329–338, October/December 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4329.pdf>; <http://www.computer.org/annals/an1989/a4329abs.htm>.
- [Cli85] **Clippinger:1985:CMO**  
 Richard F. Clippinger. Comments on meeting of October 14, 1959. *Annals of the History of Computing*, 7(4):327–328, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4326.pdf>; <http://www.computer.org/annals/an1985/a4326abs.htm>.
- [CMF<sup>+</sup>90] **Ceruzzi:1990:RLT**  
 Paul Ceruzzi, Calvin N. Mooers, Emil Friberg, William Aspray, and Herman Berg. Reviews: Lilley and Trice. A History of Information Science 1945–1985; Crandall and Flamm, eds:

- Changing the Rules: Technological Change, International Competition, and Regulation in Communications; Yates: Control Through Communication: The Rise of System in American Management; Killen: IBM: The Making of the Common View. *Annals of the History of Computing*, 12(3):210–213, July/September 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a3210.pdf>; <http://www.computer.org/annals/an1990/a3210abs.htm>.
- [CMR<sup>+</sup>83] Curtis:1983:JRP Kent K. Curtis, N. C. Metropolis, William G. Rosen, Yoshio Shimamoto, and James N. Snyder. John R. Pasta, 1918–1981 — an unusual path toward computer science. *Annals of the History of Computing*, 5(3):224–238, July/September 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3224.pdf>; <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4640708>; <http://www.computer.org/annals/an1983/a3224abs.htm>. Foreword by Eric A. Weiss.
- [Coh88] Cohen:1988:BAN I. Bernard Cohen. Babbage and Aiken: with notes on Henry Babbage’s gift to Harvard, and to other institutions, of a portion of his father’s Difference Engine. *Annals of the History of Computing*, 10(3):171–193, July/September 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a3171.pdf>; <http://www.computer.org/annals/an1988/a3171abs.htm>.
- [Coh00] Cohen:2000:HAD I. Bernard Cohen. Howard Aiken and the dawn of the computer age. In Rojas and Hashagen [RH00], pages 107–120. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- [Col91] Collins:1991:BHH Martin Collins. Review: Bruemer and Hocheiser: The high technology company: a historical and archival guide. *Annals of the History of Computing*, 13(3):308–310, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3308.pdf>; <http://www.computer.org/annals/an1991/a3308abs.htm>.
- [Coo83] Coombs:1983:MC Allen W. M. Coombs. The making of Colossus. *Annals of the History of Computing*, 5(3):253–259, July/September 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/>

- an/books/an1983/pdf/a3253.pdf; <http://www.computer.org/annals/an1983/a3253abs.htm>.
- [Cop04] B. Jack Copeland, editor. *The Essential Turing: Seminal Writings in Computing, Logic, Philosophy, Artificial Intelligence, and Artificial Life, plus The Secrets of Enigma*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2004. ISBN 0-19-825079-7 (hardcover), 0-19-825080-0 (paperback). viii + 613 pp. LCCN QA29.T8 E77 2004. URL <ftp://uiarchive.cso.uiuc.edu/pub/etext/gutenberg/>; <http://www.loc.gov/catdir/toc/fy053/2004275594.html>.
- [Cop06] B. Jack Copeland, editor. *Colossus: the secrets of Bletchley Park's codebreaking computers*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2006. ISBN 0-19-284055-X (hardcover), 0-19-957814-1 (paperback). xvi + 462 + 16 pp. LCCN D810.C88 C66 2006. URL <http://www.colossus-computer.com/>.
- [Cor90] James W. Cortada. *Archives of data-processing history: a guide to major U.S. collections*. Greenwood Press, 88 Post Road West, Westport, CT 06881, USA, 1990. ISBN 0-313-25923-2 (hardcover). xiv + 181 pp. LCCN QA76.17.A73 1990.
- [Cou82a] L. Couffignal. Calculating machines: Their principles and evolution (1933). In Randell [Ran82l], pages 145–154. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Cou82b] L. Couffignal. Scheme of assembly of a machine suitable for the calculations of celestial mechanics (1938). In Randell [Ran82l], pages 121–131. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Cra92] David J. Crawford. Autoscritcher and the super-scritcher: Aids to cryptanalysis of the German Enigma cipher machine, 1944–1946. *Annals of the History of Computing*, 14(3):9–22, July/September 1992. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1992/pdf/a3009.pdf>; <http://www.computer.org/annals/an1992/a3009abs.htm>.
- [CS85] Paul E. Ceruzzi and Jean E. Sammet. Answers to self-study questions: Comment on previous self-study answer and response. *Annals of the History of Computing*, 7(2):177–178,

**Couffignal:1982:CMT****Couffignal:1982:SAM****Crawford:1992:ASA****Ceruzzi:1985:ASS**

- April/June 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a2166.pdf>; <http://www.computer.org/annals/an1985/a2166abs.htm>.
- [CSW90] Paul Caruzzi, K. W. Smillie, and Eric Weiss. Reviews: Hyman, (ed.): *Science and Reform. Selected Works of Charles Babbage*; Goldberg (ed.): *A History of Personal Workstations. Annals of the History of Computing*, 12(4):291–293, October/December 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4291.pdf>; <http://www.computer.org/annals/an1990/a4291abs.htm>. [Cur89b]
- [Cur89a] **Caruzzi:1990:RHE**
- [Cur89c] **Cunningham:1985:CCRb**
- [Cur89c] Joseph F. Cunningham. COBOL and CODASYL revisited. *Annals of the History of Computing*, 7(4):310–313, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4304.pdf>; <http://www.computer.org/annals/an1985/a4304abs.htm>.
- [Cur89c] **Cunningham:1985:CCRa**
- [Cur89c] Joseph F. Cunningham. Reminiscences (plus a few facts). *Annals of the History of Computing*, 7(4):304–309, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4304.pdf>; <http://www.computer.org/annals/an1985/a4304abs.htm>.
- [Cur89c] **Curtis:1989:NAM**
- [Cur89c] John H. Curtis. The National Applied Mathematics Laboratories — a prospectus. *Annals of the History of Computing*, 11(1):13–18, 20–30, January/March 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a1013.pdf>; <http://www.computer.org/annals/an1989/a1013abs.htm>.
- [Cur89c] **Curtis:1989:PLC**
- [Cur89c] John H. Curtis. The program of a large computation center. *Annals of the History of Computing*, 11(1):31–41, January/March 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a1031.pdf>; <http://www.computer.org/annals/an1989/a1031abs.htm>.
- [Cur89c] **Curtiss:1989:NAM**
- [Cur89c] John H. Curtiss. The National Applied Mathematics Laboratories of the National Bureau of Standards. *Annals of the History of Computing*, 11(2):69–98, April/June 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a2069.pdf>.

pdf; <http://www.computer.org/annals/an1989/a2069abs.htm>.

**Cusumano:1991:FCP**

- [Cus91] Michael A. Cusumano. Factory concepts and practices in software development. *Annals of the History of Computing*, 13(1):3–32, January/March 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1991/pdf/a1003.pdf>; <http://www.computer.org/annals/an1991/a1003abs.htm>.

**Ceruzzi:1984:RFM**

- [CW84] Paul E. Ceruzzi and Eric A. Weiss. Reviews: F. M. Fisher, J. W. McKie, R. B. Mancke. IBM and the U.S. Data Processing Industry; IBM Corporation, Computer Technology Exhibit; capsule reviews. *Annals of the History of Computing*, 6(3):319–325, July/September 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1984/pdf/a3319.pdf>; <http://www.computer.org/annals/an1984/a3319abs.htm>. [CWM<sup>+</sup>91]

**Ceruzzi:1991:RPI**

- [CW91] Paul Ceruzzi and Eric A. Weiss. Reviews: Penzias: Ideas and Information: Managing in a High-tech World; Rose: West of Eden: The End of Innocence at Apple Computer; Lindgren: Glory & Failure: the Difference En-

gines of Johann Müller, Charles Babbage, and Edvard Scheutz; Jennings: The Devouring Fungus: Tales of the Computer Age; Norberg: High Technology Calculation in the Early 20th Century: Punched Card Machinery in Business and Government; Hall and Barry: Sunburst: The Ascent of Sun Microsystems; Heppenheimer: How von Neumann Showed the Way; Aspray: Back to Basics: The Stored Program Concept; Rosen: The Origins of Modern Computing; Taylor: In Memoriam: J.C.R. Licklider, 1915–1990; Mounier-Kuhn: Genese de l’informatique en France (1945–1965): Diffusion de l’innovation et transfert de technologie; Eisler: My Life with the Printed Circuit. *Annals of the History of Computing*, 13(2):231–234, April/June 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1991/pdf/a2231.pdf>; <http://www.computer.org/annals/an1991/a2231abs.htm>.

**Ceruzzi:1991:RGC**

Paul Ceruzzi, Eric A. Weiss, John Walker Mauer, Thomas Drucker, Peggy Aldrich Kidwell, and K. W. Smillie. Reviews: Grosch: Computer: Bit slices from a life; Tomayko: Computers in spaceflight: The NASA Experience; Bülow: Denk, Maschine! Geschichten über Robotor, computer und Künstliche Inteligenz; Napier: Rab-

dology; Charlesworth: Calculators & Computers; Calculators & Computers — The 20th Century; Transistors. forty years of computing, Datamation; Bennett: The industrial instrument — Master of industry, servant of management: Automatic control in the process industries, 1900–1940. Kapera: The Enigma Bulletin. *Annals of the History of Computing*, 13(4):364–368, October/December 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a4364.pdf>; <http://www.computer.org/annals/an1991/a4364abs.htm>.

**Czauderna:1979:KZW**

[Cza79]

Karl-Heinz Czauderna. *Konrad Zuse, der Weg zu seinem Computer Z3*. Berichte der Gesellschaft für Mathematik und Datenverarbeitung Bericht Nr. 120. R. Oldenbourg Verlag, München, Germany, 1979. ISBN 3-486-23141-3. 105 pp. LCCN QA1.G34 no.120.

**Davidson:1984:ELG**

[Dav84]

Charles Davidson. The emergence of load-and-go systems for FORTRAN. *Annals of the History of Computing*, 6(1):35–37, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1028.pdf>; <http://www.computer.org/annals/an1984/a1028abs.htm>.

[dB86]

<http://www.computer.org/annals/an1984/a1028abs.htm>.

**deBeauclair:1986:AWI**

Wilfried de Beauclair. Alwin Walther, IPM, and the development of calculator/computer technology in Germany, 1930–1945. *Annals of the History of Computing*, 8(4):334–350, October/December 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4334.pdf>; <http://www.computer.org/annals/an1986/a4334abs.htm>.

**deBakker:1971:MIS**

[dBdvdR71]

J. W. (Jacobus Willem) de Bakker, T. J. Dekker, and R. P. van de Riet, editors. *MC-25 Informatica Symposium*, volume 37 of *Mathematical Centre Tracts*. Mathematisch Centrum, Amsterdam, The Netherlands, 1971.

**Bakker:1981:ALP**

[dBvV81a]

J. W. de Bakker and J. C. van Vliet, editors. *Algorithmic languages: proceedings of the International Symposium on Algorithmic Languages*. North-Holland, Amsterdam, The Netherlands, 1981. ISBN 0-444-86285-4. xxvi + 431 pp. LCCN QA767 .I575 1981. Organized by the Mathematical Centre, Amsterdam, under the auspices of IFIP Technical Committee 2, Programming.



- [dBvV81b] **deBakker:1981:ALP**  
 Jacobus W. de Bakker and J. C. van Vliet, editors. *Algorithmic languages: proceedings of the International symposium on algorithmic languages: a tribute to Prof. Dr. A. van Wijngaarden on the occasion of his retirement from the Mathematical Centre*. North-Holland, Amsterdam, The Netherlands, 1981. ISBN 0-444-86285-4. LCCN ??? UK£23.45.
- [DK90] **Deavours:1990:TBW**  
 C. A. Deavours and Louis Kruh. The Turing bombe: Was it enough? *Cryptologia*, 14(4): 331–349, October 1990. CODEN CRYPE6. ISSN 0161-1194 (print), 1558-1586 (electronic). Reprinted in [DKK+98, pp. 403–421].
- [de 84] **deSollaPrice:1984:HCM**  
 Derek de Solla Price. A history of calculating machines. *IEEE Micro*, 4(1):22–52, January/February 1984. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).
- [Dij80] **Dijkstra:1980:PEM**  
 Edsger W. Dijkstra. A programmer’s early memories. In Metropolis et al. [MHR80], pages 563–573. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- [DK85] **Deavours:1985:MCM**  
 Cipher A. Deavours and Louis Kruh. *Machine cryptography and modern cryptanalysis*. The Artech House telecom library. Artech House Inc., Norwood, MA, USA, 1985. ISBN 0-89006-161-0. xiv + 258 pp. LCCN Z103 .D431 1985.
- [DKK+98] **Deavours:1998:SCH**  
 Cipher A. Deavours, David Kahn, Louis Kruh, Greg Mellen, and Brian J. Winkel, editors. *Selections From Cryptologia: History, People, And Technology*. The Artech House telecommunications library. Artech House Inc., Norwood, MA, USA, February 1998. ISBN 0-89006-862-3. vii + 552 pp. LCCN Z103.S45 1998. US\$78.20. URL <http://www.opengroup.com/open/cbbooks/089/0890068623.shtml>. Third volume of selected papers from issues of *Cryptologia*.
- [dLB07] **deLeeuw:2007:HIS**  
 Karl de Leeuw and J. A. Bergstra, editors. *The History of Information Security: a Comprehensive Handbook*. Elsevier, Amsterdam, The Netherlands, 2007. ISBN 0-444-51608-5 (hardcover). xi + 887 pp. LCCN Z103 .H63 2007. URL <http://www.sciencedirect.com/science/book/9780444516084>.

**Ocagne:1986:CSG**

- [dO86] Maurice d' Ocagne. *Le calcul simplifié: graphical and mechanical methods for simplifying calculation*. Charles Babbage Institute reprint series for the history of computing ; 11. Tomash Publishers, Los Angeles, CA, USA, 1986. ISBN 0-262-15032-8. 167 pp. LCCN QA75 .O15131 1986. Translation of: Calcul simplifié par les procédés mécaniques et graphiques, 3me edition.

**Dorn:1982:RKS**

- [Dor82] Philip H. Dorn. Reviews: T. Kidder: The Soul of a New Machine; capsule reviews. *Annals of the History of Computing*, 4(2):188–192, April/June 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a2188.pdf>; <http://www.computer.org/annals/an1982/a2188abs.htm>.

**Dorfman:1984:DLP**

- [Dor84] Robert Dorfman. The discovery of linear programming. *Annals of the History of Computing*, 6(3):283–295, July/September 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a3283.pdf>; <http://www.computer.org/annals/an1984/a3283abs.htm>. Foreword by George B. Dantzig.

**Dorfman:1987:IMS**

- [Dor87a] Nancy S. Dorfman. *Innovation and market structure: lessons from the computer and semiconductor industries*. Ballinger Pub. Co., Cambridge, MA, USA, 1987. ISBN 0-88730-185-1. xiv + 263 pp. LCCN HD9696.C62 D671 1987.

**Dorn:1987:N**

- [Dor87b] Philip H. Dorn. Notices. *Annals of the History of Computing*, 9(1):96–100, January/March 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1096.pdf>; <http://www.computer.org/annals/an1987/a1096abs.htm>.

**Douglas:1979:ASM**

- [Dou79] Sandy Douglas. Anecdotes: Some memories of EDSAC I: 1950–1952. *Annals of the History of Computing*, 1(2):98–99, 208, October/December 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a2098.pdf>; <http://www.computer.org/annals/an1979/a2098abs.htm>.

**Drucker:1982:WT**

- [Dru82] Peter Drucker. Work and tools. *Annals of the History of Computing*, 4(4):342–347, October/December 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/>

- an/books/an1982/pdf/a4342.pdf; <http://www.computer.org/annals/an1982/a4342abs.htm>. Foreword by Nancy Stern.
- Dana:1986:P**
- [DT86] Rosamond W. Dana and Henry S. Tropp. Prologue. *Annals of the History of Computing*, 8(3):217–218, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3217.pdf>; <http://www.computer.org/annals/an1986/a3217abs.htm>. [Eck80]
- Dubbey:1978:MWC**
- [Dub78] John Michael Dubbey. *The mathematical work of Charles Babbage*. Cambridge University Press, Cambridge, UK, 1978. ISBN 0-521-21649-4 (hardback), 0-521-52476-8 (paperback), 0-511-62239-2 (e-book). viii + 235 pp. LCCN QA27.G7 D8; QA29.B2. £17.95: CIP entry (May). URL <http://www.gbv.de/dms/bowker/toc/9780521524766.pdf>. [Eck82]
- Dreyer:1982:ACI**
- [DW82] H.-J. Dreyer and A. Walther. The automatic calculator IPM (1946). In Randell [Ran82], pages 155–161. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982. [Eis89]
- Eckert:1940:PCM**
- [Eck40] W. J. (Wallace John) Eckert. *Punched card methods in scientific computation*. The Thomas J. Watson Astronomical Computing Bureau, Columbia University, New York, NY, USA, 1940. ix + 136 pp. LCCN QA75 .E3.
- Eckert:1980:E**
- Eckert:1982:EC**
- [Eck80] J. Presper Eckert, Jr. The ENIAC. In Metropolis et al. [MHR80], pages 525–539. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- Eisler:1989:MLP**
- [Eis89] Paul Eisler. *My life with the printed circuit*. Lehigh University Press, Bethlehem, PA, USA, 1989. ISBN 0-934223-04-1. 170 pp. LCCN TK140.E37 A31 1989. Edited with notes by Mari Williams.
- Electronics:1981:AIW**
- [Ele81] Electronics. *An Age of Innovation: The World of Electronics 1930–2000*. McGraw-Hill, New York, NY, USA, 1981. ISBN 0-07-606688-6. xiv + 274 pp. LCCN TK7809 .A33 1981. US\$18.50. A special issue com-

memorating the 50th anniversary of Electronics magazine.

**Eckert:1984:PCM**

- [EM84] W. J. (Wallace John) Eckert and J. C. McPherson. *Punched card methods in scientific computation*. Charles Babbage Institute reprint series for the history of computing ; v. 5. Tomash Publishers, Los Angeles, CA, USA, 1984. ISBN 0-262-05030-7. xv + ix + 136 + [4] pp. LCCN QB51.3.E43 E28 1984. Reprint. Originally published: New York: Columbia University, 1940.

**Eckhouse:1988:AHC**

- [EM88] Richard H. Eckhouse, Jr. and Ruth A. Maulucci. Annals of the History of Computing: 1989 calendar: a microcosm of computer history. *Annals of the History of Computing*, 10(4):445–473, October/December 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4445.pdf>; <http://www.computer.org/annals/an1988/a4445abs.htm>.

**Kapera:1990:EBY**

- [Eni90] Zdzislaw Jan Kapera, editor. *The Enigma Bulletin*, 1990. ISSN 0867-8693. ????, Kraków, Poland.

**Ershov:1980:BLF**

- [Ers80] A. P. (Andrei Petrovich) Ershov. *The British lectures: four lectures*. Heyden, London, UK; Philadelphia, PA, USA, 1980.

ISBN 0-85501-491-1. xiii + 57 pp. LCCN QA76.6 .E77. Four lectures presented by Professor A.P. Ershov, Computing Centre, Siberian Division of the USSR Academy of Sciences, Novosibirsk, USSR, and delivered to British Computer Society audiences after his award as Distinguished Fellow of the BCS.

**Ershov:1980:EDP**

- [ESB80] Andrei P. Ershov and Mikhail R. Shura-Bura. The early development of programming in the USSR. In Metropolis et al. [MHR80], pages 137–196. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Estrin:1991:WY**

- [Est91] Gerald Estrin. The WEIZAC years (1954–1963). *Annals of the History of Computing*, 13(4):317–339, October/December 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a4317.pdf>; <http://www.computer.org/annals/an1991/a4317abs.htm>.

**Evans:1976:PC**

- [Eva76] Christopher Evans. Pioneers in computing. Taped interviews on

audio cassettes, 1976. Each set has ten C-60 cassettes.

Set 1: Donald W. Davies, Konrad Zuse, J. Presper Eckert, Jr., Jay W. Forrester, Tom Kilburn, J. Pinkerton, F. C. Williams, John W. Mauchly, Andrew D. Booth, and James H. Wilkinson.

Set 2: Arthur W. Burks, Stanley M. Ulam, Harry D. Huskey, Ralph J. Slutz, M. H. A. Newman, Thomas H. Flowers, Allen W. M. Coombs, Cuthbert C. Hurd, Grace Murray Hopper, and Andrew Porter.

Set 3 (to be released in 1982): Herman H. Goldstine, I. J. Good, Donald Michie, George R. Stibitz, Gordon S. Brown, John V. Atanasoff, Harold L. Hazen, Maurice V. Wilkes, Michael Woodger, and Helmut Schreyer.

**Evans:1983:C**

- [Eva83a] Bob O. Evans. Comments. *Annals of the History of Computing*, 5(2):124, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1983/pdf/a2124.pdf>; <http://www.computer.org/annals/an1983/a2124abs.htm>.

**Evans:1983:ISR**

- [Eva83b] Bob O. Evans. Introduction to the SPREAD report. *Annals of the History of Computing*, 5(1):4-5, January/March 1983. CODEN AH-COE5. ISSN 0164-1239. URL

<http://dlib.computer.org/books/an1983/pdf/a1004.pdf>; <http://www.computer.org/annals/an1983/a1004abs.htm>.

**Evans:1983:CJM**

- [Eva83c] Christopher Evans. Conversation: J. M. M. Pinkerton. *Annals of the History of Computing*, 5(1):64-72, January/March 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1983/pdf/a1064.pdf>; <http://www.computer.org/annals/an1983/a1064abs.htm>. Foreword by Henry S. Tropp.

**Evans:1983:CJW**

- [Eva83d] Christopher Evans. Conversation: Jay W. Forrester. *Annals of the History of Computing*, 5(3):297-301, July/September 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1983/pdf/a3297.pdf>; <http://www.computer.org/annals/an1983/a3297abs.htm>. Foreword by Henry S. Tropp.

**Evans:1986:SRV**

- [Eva86] Bob O. Evans. System/360: a retrospective view. *Annals of the History of Computing*, 8(2):155-179, April/June 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/books/an1986/pdf/a2155.pdf>; <http://www.computer.org/annals/an1986/a2155abs.htm>.

- org/annals/an1986/a2155abs.htm.
- [Eve80] Robert R. Everett. WHIRLWIND. In Metropolis et al. [MHR80], pages 365–384. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- [Eve83a] Robert R. Everett. About this issue. *Annals of the History of Computing*, 5(4):319–320, October/December 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4319.pdf>; <http://www.computer.org/annals/an1983/a4319abs.htm>. [Fan88]
- [Eve83b] Robert R. Everett. Epilogue. *Annals of the History of Computing*, 5(4):403, October/December 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4403.pdf>; <http://www.computer.org/annals/an1983/a4403abs.htm>. [FG90]
- [Eve86] H. Ainsley Evesham. Origins and development of nomography. *Annals of the History of Computing*, 8(4):324–333, October/December 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4324.pdf>; <http://www.computer.org/annals/an1986/a4324abs.htm>.
- [EVB83] Robert R. Everett, Charles A. Zraket, and Herbert D. Benington. SAGE — a data processing system for air defense. *Annals of the History of Computing*, 5(4):330–339, October/December 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4330.pdf>; <http://www.computer.org/annals/an1983/a4330abs.htm>.
- Irving E. Fang. *Tools of Communication: The Computer Story*. Rada Press, St. Paul, MN, USA, 1988. ISBN ???? 104 pp. LCCN ????.
- John Fauvel and Paulus Gerdes. African slave and calculating prodigy: Bicentenary of the death of Thomas Fuller. *Historia Mathematica*, 17(2):141–151, May 1990. CODEN HIMADS. ISSN 0315-0860 (print), 1090-249X (electronic). URL <http://www.sciencedirect.com/science/article/pii/031508609090050N>.

**Falkoff:1978:EA**

- [FI78] A. D. Falkoff and K. E. Iverson. The evolution of APL. *ACM SIGPLAN Notices*, 13(8):47–57, August 1978. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

**Finerman:1979:F**

- [Fin79] Aaron Finerman. Foreword. *Annals of the History of Computing*, 1(1):3, July/September 1979. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1003.pdf>; <http://www.computer.org/annals/an1979/a1003abs.htm>.

**Finerman:1984:NOF**

- [Fin84] Aaron Finerman. A note on our fifth anniversary. *Annals of the History of Computing*, 6(3):228, July/September 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a3228.pdf>; <http://www.computer.org/annals/an1984/a3228abs.htm>.

**Futrelle:1908:TMC**

- [FKK08] Jacques Futrelle, Margaret West Kinney, and Troy Kinney. *The thinking machine on the case*. D. Appleton and Company, New York, NY, USA, 1908. v + 1 + 337 + 9 + 1 pp. LCCN ????

**Foy:1986:ABR**

- [FL86] Nancy Foy and Leon Lukaszewicz. Anecdotes: Britain's Real-Time Club; Recollections About IFIP People. *Annals of the History of Computing*, 8(4):370–373, October/December 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4370.pdf>; <http://www.computer.org/annals/an1986/a4370abs.htm>.

**Flamm:1987:TCG**

- [Fla87] Kenneth Flamm. *Targeting the computer: government support and international competition*. Brookings Institution, Washington, DC, USA, 1987. ISBN 0-8157-2852-2, 0-8157-2851-4 (paperback). xiii + 266 pp. LCCN HD9696.C63 U516466 1987. US\$31.95 (hardcover), US\$11.95 (paperback).

**Flamm:1988:CCG**

- [Fla88] Kenneth Flamm. *Creating the computer: government, industry, and high technology*. Brookings Institution, Washington, DC, USA, 1988. ISBN 0-8157-2850-6, 0-8157-2849-2 (paperback). xi + 282 pp. LCCN HD9696.C62 F551 1988. US\$28.95 (hardcover), US\$10.95 (paperback).

**Flamm:1991:RMC**

- [Fla91] Kenneth Flamm. Review: Martin Campbell-Kelly: ICL: A Business and Technical History.

*Annals of the History of Computing*, 13(1):111–113, January/March 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1111.pdf>; <http://www.computer.org/annals/an1991/a1111abs.htm>. [FM84b]

**Flowers:1983:DC**

[Flo83] Thomas H. Flowers. The design of Colossus. *Annals of the History of Computing*, 5(3):239–253, July/September 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3239.pdf>; <http://www.computer.org/annals/an1983/a3239abs.htm>. Foreword by Howard Campaigne. [FMM83]

**Feigenbaum:1983:FGA**

[FM83] Edward A. Feigenbaum and Pamela McCorduck. *The fifth generation: artificial intelligence and Japan's computer challenge to the world*. Addison-Wesley, Reading, MA, USA, 1983. ISBN 0-201-11519-0. ix + 275 pp. LCCN HD9696.C63 J315 1983. [For80]

**Feigenbaum:1984:FGA**

[FM84a] Edward A. Feigenbaum and Pamela McCorduck. *The fifth generation: artificial intelligence and Japan's computer challenge to the world*. New American Library, New York, NY, USA, revised edition, 1984. [For81]

ISBN 0-451-13153-3 (paperback). xviii + 334 pp. LCCN HD9696.C63 J315 1984.

**Feigenbaum:1984:CG**

Edward A. Feigenbaum and Pamela McCorduck. *La cinquième génération*. InterEditions, Paris, France, 1984. ISBN 2-7296-0068-X. 310 pp. LCCN B 4 342 480.

**Fisher:1983:IUD**

Franklin M. Fisher, James W. McKie, and Richard B. Mancke. *IBM and the U.S. data processing industry: an economic history*. Praeger studies in select basic industries. Praeger, New York, NY, USA, 1983. ISBN 0-03-063059-2. xii + 532 pp. LCCN HD9696.C64 I48. US\$39.95.

**Forester:1980:MR**

Tom Forester. *The Microelectronics Revolution*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1980. ISBN 0-631-11651-6, 0-631-12572-8. xvii + 589 pp. LCCN QA76.9.C66M52 1980b.

**Forester:1981:MRC**

Tom Forester, editor. *The Microelectronics Revolution: the complete guide to the new technology and its impact on society*. MIT Press, Cambridge, MA, USA, 1981. ISBN 0-262-06075-2 (hardcover), 0-262-56021-6 (paperback). xvii + 589 pp. LCCN QA76.9.C66M52 1981.



- Forrester:1983:RC**
- [For83] Jay W. Forrester. Reliability of components. *Annals of the History of Computing*, 5(4):399–401, October/December 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4399.pdf>; <http://www.computer.org/annals/an1983/a4399abs.htm>. [Fut07]
- Forester:1987:HTS**
- [For87] Tom Forester. *High-Tech Society: the story of the information technology revolution*. MIT Press, Cambridge, MA, USA, 1987. ISBN 0-262-06107-4. viii + 311 pp. LCCN QA76.9.C66 F661 1987.
- Franken:1981:MBD**
- [Fra81] Ole Immanuel Franksen. Mr. Babbage, the Difference Engine, and the problem of notation: An account of the origin of recursiveness and conditionals in computer programming. *International journal of engineering science*, 79(12): 1657–1694, 1981. CODEN IJE-SAN. ISSN 0020-7225 (print), 1879-2197 (electronic).
- Franken:1984:MBS**
- [Fra84] Ole Immanuel Franksen. *Mr. Babbage's secret: the tale of a cypher and APL*. Strandberg, Birkerød, Denmark, 1984. ISBN 87-87200-86-4. 319 pp. LCCN Z103.B2 F72 1984.
- Franken:1985:MBS**
- [Fra85] Ole Immanuel Franksen. *Mr. Babbage's secret: the tale of a cypher and APL*. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 1985. ISBN 0-13-604729-7. 319 pp. LCCN Z103.B2 F721 1985.
- Futrelle:1907:TMB**
- Jacques Futrelle. *The thinking machine; being a true and complete statement of several intricate mysteries which came under the observation of Professor Augustus S. F. X. Van Dusen, Ph.D., LL.D., F.R.S., M.D., etc.* Dodd, Mead and Company, New York, NY, USA, 1907. 5 p. 1. + 342 pp. LCCN Eaton PS3511.U888 T45.
- Futrelle:1959:TM**
- [Fut59] Jacques Futrelle. *The thinking machine*. Scholastic Book Services, New York, NY, USA, 1959. 116 pp. LCCN PS3511.U888 T45 1964.
- Futrelle:1973:BTM**
- [Fut73] Jacques Futrelle. *Best "Thinking Machine" detective stories*. Dover Publications, Inc., New York, NY, USA, 1973. ISBN 0-486-20537-1. ix + 241 pp. LCCN PS3511.U98 B4.
- Futrelle:1976:GCT**
- [Fut76] Jacques Futrelle. *Great cases of the Thinking Machine*. Dover Publications, Inc., New York, NY, USA, 1976. vii + 170 pp. LCCN PS3511 .F995g.

- [FW85] **Freitag:1985:CQD** Harlow Freitag and Eric A. Weiss. Comments, queries, and debate: Comment on the review of IBM Journal and a response. *Annals of the History of Computing*, 7(1):60–62, January/March 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1060.pdf>; <http://www.computer.org/annals/an1985/a1060abs.htm>. [Gal79b]
- [FW88] **Fegley:1988:EJG** Kenneth A. Fegley and S. Reid Warren, Jr. Eloge: John Grist Brainerd (1906–1988). *Annals of the History of Computing*, 10(4):361–365, October/December 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4348.pdf>; <http://www.computer.org/annals/an1988/a4348abs.htm>. Includes bibliography of Brainerd’s publications. [Gal80a]
- [Gal79a] **Galler:1979:AIa** Bernard A. Galler. About this issue. *Annals of the History of Computing*, 1(1):4–5, July/September 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1004.pdf>; <http://www.computer.org/annals/an1979/a1004abs.htm>. [Gal80c]
- Galler:1979:AIb** Bernard A. Galler. About this issue. *Annals of the History of Computing*, 1(2):82, October/December 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a2082.pdf>; <http://www.computer.org/annals/an1979/a2082abs.htm>.
- Galler:1980:AIa** Bernard A. Galler. About this issue. *Annals of the History of Computing*, 2(1):3, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1003.pdf>; <http://www.computer.org/annals/an1980/a1003abs.htm>.
- Galler:1980:AIb** Bernard A. Galler. About this issue. *Annals of the History of Computing*, 2(2):99, April/June 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a2099.pdf>; <http://www.computer.org/annals/an1980/a2099abs.htm>.
- Galler:1980:AIc** Bernard A. Galler. About this issue. *Annals of the History of Computing*, 2(3):195, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/>

an/books/an1980/pdf/a3195.pdf; <http://www.computer.org/annals/an1980/a3195abs.htm>.

**Galler:1980:AIId**

- [Gal80d] Bernard A. Galler. About this issue. *Annals of the History of Computing*, 2(4):283, October/December 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4283.pdf>; <http://www.computer.org/annals/an1980/a4283abs.htm>.

**Galler:1981:AIa**

- [Gal81a] Bernard A. Galler. About this issue. *Annals of the History of Computing*, 3(1):3, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1003.pdf>; <http://www.computer.org/annals/an1981/a1003abs.htm>.

**Galler:1981:AIb**

- [Gal81b] Bernard A. Galler. About this issue. *Annals of the History of Computing*, 3(2):115, April/June 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a2115.pdf>; <http://www.computer.org/annals/an1981/a2115abs.htm>.

**Galler:1981:AIc**

- [Gal81c] Bernard A. Galler. About this issue. *Annals of the History*

*of Computing*, 3(3):211, July/September 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a3211.pdf>; <http://www.computer.org/annals/an1981/a3211abs.htm>.

**Galler:1981:AIId**

- [Gal81d] Bernard A. Galler. About this issue. *Annals of the History of Computing*, 3(4):307, October/December 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a4307.pdf>.

**Galler:1982:AIa**

- [Gal82a] Bernard A. Galler. About this issue. *Annals of the History of Computing*, 4(1):3, January/March 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1003.pdf>; <http://www.computer.org/annals/an1982/a1003abs.htm>.

**Galler:1982:AIb**

- [Gal82b] Bernard A. Galler. About this issue. *Annals of the History of Computing*, 4(2):99, April/June 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a2099.pdf>; <http://www.computer.org/annals/an1982/a2099abs.htm>.

- [Gal82c] **Galler:1982:AIc**  
 Bernard A. Galler. About this issue. *Annals of the History of Computing*, 4(3):195, July/September 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3195.pdf>; <http://www.computer.org/annals/an1982/a3195abs.htm>.
- [Gal82d] **Galler:1982:AIId**  
 Bernard A. Galler. About this issue. *Annals of the History of Computing*, 4(4):295, October/December 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a4295.pdf>; <http://www.computer.org/annals/an1982/a4295abs.htm>.
- [Gal83a] **Galler:1983:AIa**  
 Bernard A. Galler. About this issue. *Annals of the History of Computing*, 5(1):3, January/March 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a1003.pdf>; <http://www.computer.org/annals/an1983/a1003abs.htm>.
- [Gal83b] **Galler:1983:AIb**  
 Bernard A. Galler. About this issue. *Annals of the History of Computing*, 5(3):223, July/September 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3223.pdf>; <http://www.computer.org/annals/an1983/a3223abs.htm>.
- [Gal86a] **Galler:1986:AIa**  
 Bernard A. Galler. About this issue. *Annals of the History of Computing*, 8(2):115, April/June 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a2115.pdf>; <http://www.computer.org/annals/an1986/a2115abs.htm>.
- [Gal86b] **Galler:1986:AIb**  
 Bernard A. Galler. About this issue. *Annals of the History of Computing*, 8(4):323, October/December 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4323.pdf>; <http://www.computer.org/annals/an1986/a4323abs.htm>.
- [Gal86c] **Galler:1986:AIS**  
 Bernard A. Galler. About this issue: Special Issue: AFIPS 1961-1986 — 25th Anniversary. *Annals of the History of Computing*, 8(3):211, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3211.pdf>; <http://www.computer.org/annals/an1986/a3211abs.htm>.

- [Gal86d] **Galler:1986:IU**  
Bernard A. Galler. The IBM 650 and the universities. *Annals of the History of Computing*, 8(1):36–38, January/March 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1036.pdf>; <http://www.computer.org/annals/an1986/a1036abs.htm>.
- [Gal87a] **Galler:1987:AIS**  
Bernard A. Galler. About this issue: Special issue: The Burroughs B 5000. *Annals of the History of Computing*, 9(1):1, January/March 1987. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1001.pdf>; <http://www.computer.org/annals/an1987/a1001abs.htm>.
- [Gal87b] **Galler:1987:E**  
Bernard A. Galler. Epilogue. *Annals of the History of Computing*, 9(1):93, January/March 1987. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1093.pdf>; <http://www.computer.org/annals/an1987/a1093abs.htm>.
- [Gar85] **Gardner:1985:MNS**  
Howard Gardner. *The mind's new science: a history of the cognitive revolution*. Basic Books, New York, NY, USA, 1985. ISBN 0-465-04634-7. xv + 423 pp. LCCN BF311 .G3391 1985. US\$22.50.
- [Gar87] **Gardner:1987:MNS**  
Howard Gardner. *The mind's new science: a history of the cognitive revolution*. Basic Books, New York, NY, USA, 1987. ISBN 0-465-04635-5 (paperback). xv + 430 pp. LCCN BF311 .G339 1987. US\$12.95.
- [GCL83] **Greenstadt:1983:TL**  
J. Greenstadt, John W. Carr III, and D. W. Ladd. Three letters. *Annals of the History of Computing*, 5(2):152–153, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2152.pdf>; <http://www.computer.org/annals/an1983/a2152abs.htm>.
- [GG82] **Goldstine:1982:ENI**  
H. H. Goldstine and Adele Goldstine. The electronic numerical integrator and computer (ENIAC) (1946). In Randell [Ran82], pages 359–373. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [GG90] **Grattan-Guinness:1990:WHP**  
I. Grattan-Guinness. Work for the hairdressers: The production of de Prony's logarithmic and trigonometric tables. *Annals of the History of Computing*, 12(3):177–185, July/

September 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a3177.pdf>; <http://www.computer.org/annals/an1990/a3177abs.htm>.

**Grattan-Guinness:1992:CBA**

- [GG92] I. Grattan-Guinness. Charles Babbage as an algorithmic thinker. *Annals of the History of Computing*, 14(3):34–48, July/September 1992. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1992/pdf/a3034.pdf>; <http://www.computer.org/annals/an1992/a3034abs.htm>. [GIS90]

**Griffith:1985:CQD**

- [GGB85] John E. Griffith, Herbert R. J. Grosch, and Werner Buchholz. Comments, queries and debate: More comment on review of IBM Journal; still more about IBM; Editor's note. *Annals of the History of Computing*, 7(3):251–252, July/September 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a3251.pdf>; <http://www.computer.org/annals/an1985/a3251abs.htm>. [GL81]

**Graham:1985:HMS**

- [GH85] R. L. Graham and Pavol Hell. On the history of the minimum spanning tree problem. *Annals of the History of Computing*, 7(1):43–57, January/

March 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1043.pdf>; <http://www.computer.org/annals/an1985/a1043abs.htm>.

**Glimm:1990:LJN**

James Glimm, John Impagliazzo, and I. M. (Isadore Manuel) Singer, editors. *The Legacy of John von Neumann: Proceedings of the Summer Research Institute on the Legacy of John von Neumann held at Hofstra University Hempstead, New York, May 29–June 4, 1988*, volume 50 of *Proceedings of symposia in pure mathematics*. American Mathematical Society, Providence, RI, USA, 1990. ISBN 0-8218-1487-7. vii + 334 pp. LCCN QA29 .V66 L44 1990.

**Goldstine:1981:RKC**

Herman H. Goldstine and John A. N. Lee. Reviews: K. C. Redmond and T. M. Smith: Project Whirlwind; S. H. Lavington: Early British Computers; capsule reviews. *Annals of the History of Computing*, 3(1):74–75, 77, 79–80, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1074.pdf>; <http://www.computer.org/annals/an1981/a1074abs.htm>.

- [Gla86] **Glaser:1986:IW**  
 E. L. Glaser. The IBM 650 and the Woodenwheel. *Annals of the History of Computing*, 8(1):30–31, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1030.pdf>; <http://www.computer.org/annals/an1986/a1030abs.htm>.
- [Gla91] **Glass:1991:PFS**  
 Robert L. Glass. ‘project that failed’ that succeeded. *Annals of the History of Computing*, 13(1):91, January/March 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1091.pdf>; <http://www.computer.org/annals/an1991/a1091abs.htm>.
- [GM85] **Galler:1985:AIC**  
 Bernard A. Galler and P. M. Murphy. Anecdotes: I/O in the IBM 799 Computer; A 1940 Word Processor; . *Annals of the History of Computing*, 7(3):256, July/September 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a3256.pdf>; <http://www.computer.org/annals/an1985/a3256abs.htm>.
- [GMT85] **Grosch:1985:RWJ**  
 H. R. J. Grosch, John C. McPherson, and Henry S. Tropp. Reviews: W. J. Eckert, Punched Card Methods in Scientific Computation; Comment on Review; Reprint of Mathematical Operations with Punched Cards; D. J. Albers and G. L. Alexander, Mathematical People; capsule reviews. *Annals of the History of Computing*, 7(4):365–374, 376, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4365.pdf>; <http://www.computer.org/annals/an1985/a4365abs.htm>.
- [GND<sup>+</sup>87] **Golub:1987:JW**  
 Gene H. Golub, Miki Neumann, James W. Demmel, Paul Saylor, James M. Boyle, Iain Duff, and Jack Dongarra. James Wilkinson (1919–1986). *Annals of the History of Computing*, 9(2):205–210, April/June 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a2203.pdf>; <http://www.computer.org/annals/an1987/a2203abs.htm>. From the introduction: “A series of lightly edited extracts from messages that were sent over various computer networks during the period October 5, 1986–February 13, 1987”.
- [Gol77] **Goldstine:1977:HNA**  
 Herman Heine Goldstine. *A history of numerical analysis from*

*the 16th through the 19th century*, volume 2 of *Studies in the history of mathematics and physical sciences*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1977. ISBN 0-387-90277-5. xiv + 348 pp. LCCN QA297 .G64.

**Goldberg:1984:RAF**

[Gol84]

Richard Goldberg. Register allocation in FORTRAN I. *Annals of the History of Computing*, 6(1):19–20, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1015.pdf>; <http://www.computer.org/annals/an1984/a1015abs.htm>.

**Goldberg:1988:HPW**

[Gol88]

Adele Goldberg. *A History of Personal Workstations*. ACM Press history series. Addison-Wesley, Reading, MA, USA, 1988. ISBN 0-201-11259-0. xx + 537 pp. LCCN QA76.17 .H571 1988. US\$44.95 (est.). Revised versions of papers presented at ACM Conference on the History of Personal Workstations, Jan. 9-10, 1986, Palo Alto, CA, USA; sponsored by Association for Computing Machinery.

**Good:1979:EWC**

[Goo79]

I. J. Good. Early work on computers at Bletchley. *Annals of the History of Computing*, 1(1):38–48, July/

[Goo80]

September 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1038.pdf>; <http://www.computer.org/annals/an1979/a1038abs.htm>.

**Good:1980:PWC**

I. J. Good. Pioneering work on computers at Bletchley. In Metropolis et al. [MHR80], pages 31–46. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Gordon:1986:IMS**

[Gor86]

Barry Gordon. The IBM MD-DPM — some recollections of a great machine. *Annals of the History of Computing*, 8(1):77–83, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1077.pdf>; <http://www.computer.org/annals/an1986/a1077abs.htm>.

**Graef:1973:JRV**

[Gra73]

Martin Graef. *350 Jahre Rechenmaschinen: Vorträge e. Festkolloquiums. (German) [350 Years of Computing Machines]*. Carl Hanser, München, Germany, 1973. ISBN 3-446-11838-1. 124 pp. LCCN ????



- Greibach:1981:FLO**
- [Gre81] S. A. Greibach. Formal languages: Origins and directions. *Annals of the History of Computing*, 3(1):14–41, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1014.pdf>; <http://www.computer.org/annals/an1981/a1014abs.htm>.
- Greenstadt:1983:RTC**
- [Gre83] John Greenstadt. Recollections of the Technical Computing Bureau. *Annals of the History of Computing*, 5(2):149–152, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2149.pdf>; <http://www.computer.org/annals/an1983/a2149abs.htm>.
- Greenfield:1984:IFS**
- [Gre84] Martin N. Greenfield. The impact of FORTRAN standardization. *Annals of the History of Computing*, 6(1):33, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1028.pdf>; <http://www.computer.org/annals/an1984/a1028abs.htm>.
- Greenstein:1991:ATS**
- [Gre91] Shane Greenstein. Anecdotes: The tape story tapestry: Historical research with inaccessible digital information technologies. *Annals of the History of Computing*, 13(3):278–285, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3277.pdf>; <http://www.computer.org/annals/an1991/a3277abs.htm>.
- Grosch:1983:GE**
- [Gro83] H. R. J. Grosch. 6. the 701 at General Electric. *Annals of the History of Computing*, 5(2):195–197, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2195.pdf>; <http://www.computer.org/annals/an1983/a2195abs.htm>.
- Grosch:1991:CQD**
- [Gro91a] Herb Grosch. Comments, queries, and debate: Early computing courses. *Annals of the History of Computing*, 13(3):306–307, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3306.pdf>; <http://www.computer.org/annals/an1991/a3306abs.htm>.
- Grosch:1991:CBS**
- [Gro91b] Herbert R. J. Grosch. *Computer: bit slices from a life*. Third Millenium Books, Novato, CA, USA, 1991. ISBN 0-88733-085-1, 0-88733-084-3 (signed

- ed.). viii + 263 + [12] pp. LCCN QA76.17.G76 1991. US\$24.95, US\$50.00 (signed edition). [Gul80]
- [Gru79] **Gruenberger:1979:HJ**  
 F. J. Gruenberger. The history of the JOHNNIAC. *Annals of the History of Computing*, 1(1):49–60, July/September 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1049.pdf>; <http://www.computer.org/annals/an1979/a1049abs.htm>. See minor correction [Ano80c].
- [Gru80a] **Gruenberger:1980:HES**  
 Fred J. Gruenberger. History of eighteen symposia. *Annals of the History of Computing*, 2(3):251–252, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3251.pdf>; <http://www.computer.org/annals/an1980/a3251abs.htm>. [Had83]
- [Gru80b] **Gruenberger:1980:SHD**  
 Fred J. Gruenberger. A short history of digital computing in Southern California. *Annals of the History of Computing*, 2(3):246–250, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3246.pdf>; <http://www.computer.org/annals/an1980/a3246abs.htm>. [Hae86]
- Gullard:1980:CBI**  
 Pamela Gullard. The Charles Babbage Institute for the History of Information Processing. *Annals of the History of Computing*, 2(1):71–74, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1071.pdf>; <http://www.computer.org/annals/an1980/a1071abs.htm>.
- [Gus00] **Gustafson:2000:RAB**  
 John Gustafson. Reconstruction of the Atanasoff–Berry Computer. In Rojas and Hashagen [RH00], pages 91–106. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17.F57 2000. URL <http://johngustafson.net/pubs/pub57/ABCPaper.htm>.
- Haddad:1983:R**  
 Jerrier A. Haddad. 701 recollections. *Annals of the History of Computing*, 5(2):118–124, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2118b.pdf>; <http://www.computer.org/annals/an1983/a2118babs.htm>.
- Haefner:1986:ISR**  
 R. R. Haefner. The IBM 650 at Savannah River. *Annals of the History of Computing*, 8(1):84–85, January/

- March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1084.pdf>; <http://www.computer.org/annals/an1986/a1084abs.htm>. [Ham80]
- Halpern:1991:MHP**
- [Hal91] Mark Halpern. Memoir: On the heels of the pioneers. *Annals of the History of Computing*, 13(1):101–111, January/March 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1111.pdf>; <http://www.computer.org/annals/an1991/a1111abs.htm>. See erratum [Wei91d]. [Har46]
- Hall:2009:GSP**
- [Hal09] Derek Hall, editor. *Great scientists. Philosophy, invention, and engineering*. Facts at your fingertips. Brown Bear Books, Redding, CT, USA, 2009. ISBN 1-933834-48-X. 64 pp. LCCN T39 .P53 2009.
- Hamming:1979:RZW**
- [Ham79] Richard W. Hamming. Reviews: Z. W. Pylyshyn: Perspectives on the Computer Revolution; capsule reviews. *Annals of the History of Computing*, 1(2):100, 208, October/December 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a2100.pdf>; <http://www.computer.org/annals/an1979/a2100abs.htm>. [Har47b]
- Hamming:1980:WWK**
- R. W. Hamming. We would know what they thought when they did it. In Metropolis et al. [MHR80], pages 3–9. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- HUCL:1946:MOA**
- Harvard University. Computation Laboratory. *A Manual of Operation for the Automatic Sequence Controlled Calculator*. Its Annals v. 1. Harvard University Press, Cambridge, MA, USA, 1946. 561 pp. LCCN QA3 .H3 v.1.
- Hartree:1947:CMR**
- [Har47a] Douglas R. (Douglas Rayner) Hartree. *Calculating machines; recent and prospective developments and their impact on mathematical physics, inaugural lecture*. University Press, Cambridge, England, 1947. 40 pp. LCCN QA85 .H25c.
- Harvard:1947:PSL**
- Harvard University, editor. *Proceedings of a Symposium on Large-Scale Digital Calculating Machinery*. The Annals of the computation laboratory of Harvard University ; v. 16, 26. Harvard University Press, Cam-

- bridge, MA, USA, 1947. LCCN QA3 .H3 v.16, 26.
- [Har49] **Hartree:1949:CIM**  
 Douglas R. (Douglas Rayner) Hartree. *Calculating Instruments and Machines*. University of Illinois Press, Urbana, IL, USA, 1949. ix + 138 pp. LCCN QA85 .H29.
- [Har50] **Hartree:1950:CIM**  
 Douglas R. (Douglas Rayner) Hartree. *Calculating instruments and machines*. University Press, Cambridge, UK, 1950. ix + 138 pp. LCCN B 4 248 631.
- [Har51] **Harvard:1951:PSS**  
 Harvard University, editor. *Proceedings of a Second Symposium on Large-Scale Digital Calculating Machinery*. The Annals of the computation laboratory of Harvard University ; v. 26. Harvard University Press, Cambridge, MA, USA, 1951. xxxviii + 393 pp. LCCN QA75 .S96 1949.
- [Har53] **Hartree:1953:CIM**  
 Douglas R. (Douglas Rayner) Hartree. *Calculating instruments and machines*. The University of Illinois Press, Urbana, IL, USA, 1953. ix + 138 pp. LCCN QA85 .H29.
- [Har81] **Hartmanis:1981:OAD**  
 Juris Hartmanis. Observations about the development of theoretical computer science. *Annals of the History of Computing*, 3(1):42-51, January/
- March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1042.pdf>; <http://www.computer.org/annals/an1981/a1042abs.htm>.
- [Har83] **Harrington:1983:RDT**  
 John V. Harrington. Radar data transmission. *Annals of the History of Computing*, 5(4):370-374, October/December 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4370.pdf>; <http://www.computer.org/annals/an1983/a4370abs.htm>.
- [Har84] **Hartree:1984:CMR**  
 Douglas R. (Douglas Rayner) Hartree. *Calculating machines: recent and prospective developments and their impact on mathematical physics and, Calculating instruments and machines*. Charles Babbage Institute reprint series for the history of computing ; v. 6. Tomash Publishers, Los Angeles, CA, USA, 1984. ISBN 0-262-08147-4. xvi + 40 + viii + 138 + [3] pp. LCCN QA85 .H3 1984. Reprint (1st work). Originally published: Cambridge, England: University Press, 1947. Reprint (2nd work). Originally published: Urbana: University of Illinois Press, 1949.
- [Har85a] **Harvard:1985:PSL**  
 Harvard University, editor. *Pro-*

- ceedings of a Symposium on Large-Scale Digital Calculating Machinery, 7–10 January 1947*, volume 7 of *Charles Babbage Institute reprint series for the history of computing*. Tomash Publishers, Los Angeles, CA, USA, 1985. ISBN 0-262-08152-0. xxix + 302 pp. LCCN QA75 .S96 1947. Reprint, with new introduction by William Aspray. Originally published: Cambridge, Mass: Harvard University Press, 1948. (The Annals of the Computation Laboratory of Harvard University; v. 16).
- [Har85b] **HUCL:1985:MOA**  
Harvard University. Computation Laboratory. *A Manual of Operation for the Automatic Sequence Controlled Calculator*. Charles Babbage Institute reprint series for the history of computing ; v. 8. Tomash Publishers, Los Angeles, CA, USA, 1985. ISBN 0-262-01084-4. xxxii + 561 p. + xvii pp. LCCN QA75 .M348 1985. Reprint. Originally published: Cambridge, Mass.: Harvard University Press, 1946. (Annals of the Computation Laboratory of Harvard University ; v. 1).
- [Haw88] **Hawkins:1988:FCM**  
W. F. Hawkins. The first calculating machine (John Napier, 1617). *Annals of the History of Computing*, 10(1):37–51, 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1035.pdf>; <http://www.computer.org/annals/an1988/a1035abs.htm>.
- [Hawxx] **Hawkhill:19xx:CHL**  
Hawkhill Associates. *The Computer: a Hawkhill Learning Power Book*. Hawkhill Associates, Inc., 125 E. Gilman St., Madison, Wisconsin 53703, USA, 19xx. ISBN 1-55979-012-1. 30 pp. LCCN ????
- [HB90] **Hall:1990:SAS**  
Mark Hall and John Barry. *Sunburst: The Ascent of Sun Microsystems*. Contemporary Books, Inc., 180 North Michigan Avenue, Chicago, IL 60601, USA, 1990. ISBN 0-8092-3989-2, 0-8092-4368-7. xvii + 297 pp. LCCN HD9696.C64 S794 1990.
- [HEA+83] **Haanstra:1983:PPF**  
John W. Haanstra, Bob O. Evans, Joes D. Aron, Frederick P. Brooks, Jr., John W. Fairclough, William P. Heising, Herbert Hellerman, Walter H. Johnson, Martin J. Kelly, Douglas V. Newton, Bruce G. Oldfield, Seymour A. Rosen, and Jerome Svigals. Processor products — final report of the SPREAD Task Group, December 28, 1961. *Annals of the History of Computing*, 5(1):6–26, January/March 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a1006.pdf>; <http://www.computer.org/annals/an1983/a1006abs.htm>.

- org/annals/an1983/a1006abs.htm.
- [Hei84] William P. Heising. The emergence of FORTRAN IV from FORTRAN II. *Annals of the History of Computing*, 6(1):31–32, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1028.pdf>; <http://www.computer.org/annals/an1984/a1028abs.htm>.
- [Hei91] Lars Heide. From invention to production: The development of punched-card machines by F. R. Bull and K. A. Knutsen 1918–1930. *Annals of the History of Computing*, 13(3):261–272, July/September 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3261.pdf>; <http://www.computer.org/annals/an1991/a3261abs.htm>.
- [Hem86] David Hemmes. FORTRANSIT recollections. *Annals of the History of Computing*, 8(1):70–73, January/March 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1070.pdf>; <http://www.computer.org/annals/an1986/a1070abs.htm>.
- [Hep90] T. A. Heppenheimer. How von Neumann showed the way. *American Heritage of Invention and Technology*, pages 8–16, Fall 1990. CODEN AHETEU. ISSN 8756-7296.
- [Her86] John G. Herriot. Educational experience with the IBM 650. *Annals of the History of Computing*, 8(1):59–61, January/March 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1059.pdf>; <http://www.computer.org/annals/an1986/a1059abs.htm>.
- [Her88] Rolf Herken. *The Universal Turing machine: a half-century survey*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1988. ISBN 0-19-853741-7. xiv + 661 pp. LCCN QA267.U55 1988; QA267.U941 1988.
- [Her95] Rolf Herken. *The Universal Turing machine: a half-century survey*, volume 2 of *Computerkultur*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., second edition, 1995. ISBN 3-211-82637-8 (paperback), 3-211-82628-9. ISSN 0946-9613. xvi + 611 pp. LCCN QA267.U55 1995.

- [HG79] **Hyman:1979:RDM**  
 Anthony Hyman and N. T. Gridgeman. Reviews: D. L. Moore: Ada, Countess of Lovelace; J. M. Dubbey: The Mathematical Work of Charles Babbage. *Annals of the History of Computing*, 1(1):75–76, July/September 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1075.pdf>; <http://www.computer.org/annals/an1979/a1075abs.htm>.
- [HHE82] **Higgins:1982:ECF**  
 W. H. C. Higgins, B. D. Holbrook, and J. W. Emling. Electrical computers for fire control. *Annals of the History of Computing*, 4(3):218–236, July/September 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3218.pdf>; <http://www.computer.org/annals/an1982/a3218abs.htm>. Reprinted from “A History of Engineering and Science in the Bell System” (Volume II, National Service in War and Peace (1925–1975)).
- [HH79] **Hinsley:1979:BISb**  
 F. H. (Francis Harry) Hinsley and Michael Eliot Howard. *British intelligence in the Second World War: its influence on strategy and operations*. Cambridge University Press, Cambridge, UK, 1979. ISBN 0-521-22940-5 (vol. 1). various pp. LCCN D810.S7 H47 1979b. Vols. 3-4 in series: History of the Second World War. Vol. 4 has subtitle: Security and counter-intelligence; Vol. 5 has subtitle: Strategic deception.
- [Hil91] **Hillion:1991:CQD**  
 Pierre Hillion. Comments, queries, and debate: Computing in the French Army. *Annals of the History of Computing*, 13(3):307, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3306.pdf>; <http://www.computer.org/annals/an1991/a3306abs.htm>.
- [HH80] **Huskey:1980:LLC**  
 Velma R. Huskey and Harry D. Huskey. Lady Lovelace and Charles Babbage. *Annals of the History of Computing*, 2(4):299–329, October/December 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4299.pdf>; <http://www.computer.org/annals/an1980/a4299abs.htm>.
- [Hin93] **Hinsley:1993:BIS**  
 F. H. (Francis Harry) Hinsley. *British intelligence in the Second World War*. Cambridge University Press, Cambridge, UK, abridged edition, 1993. ISBN 0-521-44304-0. xiii + 628 pp. LCCN D810.S7 H49

1993. Abridgement of British intelligence in the Second World War originally published in 5 v. between 1979–1990.
- [HK86] **Hamilton:1986:IMD**  
F. E. Hamilton and E. C. Kubie. The IBM Magnetic Drum Calculator Type 650. *Annals of the History of Computing*, 8(1):14–19, January/March 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1014.pdf>; <http://www.computer.org/annals/an1986/a1014abs.htm>. [Hod85]
- [HOAS84] **Hellerman:1984:SDC**  
Herbert Hellerman, Robert W. O’Neill, Gene M. Amdahl, and Jerome Svigals. The SPREAD discussion continued. *Annals of the History of Computing*, 6(2):144–151, April/June 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2144.pdf>; <http://www.computer.org/annals/an1984/a2144abs.htm>. [Hof90]
- [Hod83a] **Hodges:1983:ATEa**  
Andrew Hodges. *Alan Turing: the enigma*. Burnett Books, London, UK, 1983. ISBN 0-09-152130-0. 587 + [8] pp. LCCN QA29.T8 H63 1983. [Hol82a]
- [Hod83b] **Hodges:1983:ATEb**  
Andrew Hodges. *Alan Turing: the enigma*. Simon and Schuster, New York, NY, USA, 1983. ISBN 0-671-49207-1. 587 + [8] pp. LCCN QA29.T8 H63 1983. [Hodges:1985:ATE]
- [Hodges:1985:ATE]  
Andrew Hodges. *Alan Turing: the enigma of intelligence*. Counterpoint. Unwin Paperbacks, London, UK, 1985. ISBN 0-04-510060-8 (paperback). 586 pp. LCCN ???? Originally published: London: Burnett Books, 1983.
- [Hodges:2000:ATE]  
Andrew Hodges. *Alan Turing: the enigma*. Walker, New York, NY, USA, 2000. ISBN 0-8027-7580-2 (paperback). xvii + 587 + [8] pp. LCCN QA29.T8 H63 2000. Previously published: New York: Simon and Schuster, 1983. With new introduction.
- [Hoffsaes:1990:FSC]  
Colette Hoffsaes. The French Society of Computer Scientists: AFCET. *Annals of the History of Computing*, 12(3):167–176, July/September 1990. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a3167.pdf>; <http://www.computer.org/annals/an1990/a3167abs.htm>.
- [Hollerith:1982:ETS]  
H. Hollerith. An electric tabulating system (1889). In Randell [Ran82], pages 133–143. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.



- [Hol82b] **Holst:1982:GPP**  
 Per A. Holst. George A. Philbrick and Polyphemus: The first electronic training simulator. *Annals of the History of Computing*, 4(2):143–156, April/June 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a2143.pdf>; <http://www.computer.org/annals/an1982/a2143abs.htm>.
- [Hop87] **Hopper:1987:EC**  
 Grace Murray Hopper. The education of a computer. *Annals of the History of Computing*, 9(3/4):271–281, July/September 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3271.pdf>; <http://www.computer.org/annals/an1987/a3271abs.htm>. Introduction by David Gries. Reprint of 1952 ACM conference paper.
- [Hop00] **Hopmann:2000:GGF**  
 Wilhelm Hopmann. The G1 and the Göttingen family of digital computers. In Rojas and Hashagen [RH00], pages 295–313. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- [Hor82] **Hord:1982:IIF**  
 R. Michael Hord. *The Il-iac IV, the first supercomputer*. Computer Science Press, Inc., Rockville, MD, USA, 1982. ISBN 0-914894-71-4. xii + 350 pp. LCCN QA76.8.I5 .H67 1982.
- [Hou80] **Householder:1980:ROR**  
 A. S. Householder. Reminiscences of Oak Ridge. In Metropolis et al. [MHR80], pages 385–388. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- [How88] **Howell:1988:JN**  
 Catherine Herbert Howell. John von Neumann. In *Inventors and discoverers: changing our world* [Nat88], page ?? ISBN 0-87044-751-3, 0-87044-752-1, 0-87044-753-X. LCCN T18 .I57 1988.
- [HT79] **Hinsley:1979:BISa**  
 F. H. (Francis Harry) Hinsley and E. E. Thomas. *British intelligence in the Second World War: its influence on strategy and operations*. London, UK, 1979. various pp. UK£10.00 (vol. 1). Vol. 3, pt. 2 has additional author C. A. G. Simkins.
- [Hug84] **Hughes:1984:EFL**  
 Robert A. Hughes. Early FORTRAN at Livermore. *Annals of the History of Computing*, 6(1):30, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/>

- pdf/a1028.pdf; <http://www.computer.org/annals/an1984/a1028abs.htm>.
- Hughes:1986:SCE**
- [Hug86] Ernest S. Hughes. The SSEC and its carry-over effects on the IBM Type 650. *Annals of the History of Computing*, 8(1):12–13, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1012.pdf>; <http://www.computer.org/annals/an1986/a1012abs.htm>.
- Hull:1941:UM**
- [Hul41] Richard Hull. *The Unfortunate Murderer*. Collins, London, UK, 1941.
- Humphrey:1987:MF**
- [Hum87] Watts S. Humphrey. MO-BIDIC and Fieldata. *Annals of the History of Computing*, 9(2):137–182, April/June 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a2137.pdf>; <http://www.computer.org/annals/an1987/a2137abs.htm>.
- Hunter:1983:R**
- [Hun83] G. Truman Hunter. Recollections. *Annals of the History of Computing*, 5(2):173–174, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2173b.pdf>; <http://www.computer.org/annals/an1983/a2173babs.htm>.
- Hunter:1986:SSE**
- [Hun86] George Truman Hunter. The solution of simultaneous equations. *Annals of the History of Computing*, 8(1):86–87, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1086.pdf>; <http://www.computer.org/annals/an1986/a1086abs.htm>.
- Hurd:1980:CDM**
- [Hur80] Cuthbert C. Hurd. Computer development at IBM. In Metropolis et al. [MHR80], pages 389–418. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- Hurd:1981:EIC**
- [Hur81] Cuthbert C. Hurd. Early IBM computers: Edited testimony. *Annals of the History of Computing*, 3(2):163–182, April/June 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a2163.pdf>; <http://www.computer.org/annals/an1981/a2163abs.htm>.

- [Hur83a] **Hurd:1983:AIS**  
 Cuthbert C. Hurd. About this issue: Special issue on the IBM 701. *Annals of the History of Computing*, 5(2):107, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2107a.pdf>; <http://www.computer.org/annals/an1983/a2107aabs.htm>. [Hur85]
- [Hur83b] **Hurd:1983:E**  
 Cuthbert C. Hurd. Epilogue. *Annals of the History of Computing*, 5(2):218-219, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2218.pdf>; <http://www.computer.org/annals/an1983/a2218abs.htm>.
- [Hur83c] **Hurd:1983:ILM**  
 Cuthbert C. Hurd. IBM Letter #4571 [May 7, 1954]; IBM Letter #4666 [October 1, 1954]. *Annals of the History of Computing*, 5(2):215-217, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2213b.pdf>; <http://www.computer.org/annals/an1983/a2213babs.htm>. [Hur86a]
- [Hur83d] **Hurd:1983:P**  
 Cuthbert C. Hurd. Prologue. *Annals of the History of Computing*, 5(2):110-111, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2110.pdf>; <http://www.computer.org/annals/an1983/a2110abs.htm>. [Hur85]
- Hurd:1985:NEM**  
 Cuthbert C. Hurd. A note on early Monte Carlo computations and scientific meetings. *Annals of the History of Computing*, 7(2):141-155, April/June 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a2141.pdf>; <http://www.computer.org/annals/an1985/a2141abs.htm>. Includes typeset reprint of [RUvN47].
- Hurd:1986:AIS**  
 Cuthbert C. Hurd. About this issue: Special issue: IBM 650—IBM expands the computing world. *Annals of the History of Computing*, 8(1):3, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1003a.pdf>; <http://www.computer.org/annals/an1986/a1003aabs.htm>.
- Hurd:1986:E**  
 Cuthbert C. Hurd. Epilogue. *Annals of the History of Computing*, 8(1):88, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL

- <http://dlib.computer.org/an/books/an1986/pdf/a1088.pdf>; <http://www.computer.org/annals/an1986/a1088abs.htm>.
- [Hus84] **Hurd:1986:P**
- [Hur86c] Cuthbert C. Hurd. Prologue. *Annals of the History of Computing*, 8(1):6–7, January/March 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1006.pdf>; <http://www.computer.org/annals/an1986/a1006abs.htm>.
- [Hus80a] **Huskey:1980:NBS**
- [Hus85] Harry D. Huskey. The National Bureau of Standards Western Automatic Computer (SWAC). *Annals of the History of Computing*, 2(2):111–121, April/June 1980. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a2111.pdf>; <http://www.computer.org/annals/an1980/a2111abs.htm>.
- [Hus80b] **Huskey:1980:SNB**
- [Hus91] Harry D. Huskey. The SWAC: The National Bureau of Standards Western Automatic Computer. In Metropolis et al. [MHR80], pages 419–431. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- Huskey:1984:AG**
- Harry D. Huskey. From ACE to the G-15. *Annals of the History of Computing*, 6(4):350–371, October/December 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4350.pdf>; <http://www.computer.org/annals/an1984/a4350abs.htm>.
- Huskey:1985:AWW**
- Velma R. Huskey. Anecdotes: Who was the mysterious countess? *Annals of the History of Computing*, 7(1):58–59, January/March 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1058.pdf>; <http://www.computer.org/annals/an1985/a1058abs.htm>.
- Huskey:1991:MED**
- Harry D. Huskey. Memoir: The early days. *Annals of the History of Computing*, 13(3):290–306, July/September 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3285.pdf>; <http://www.computer.org/annals/an1991/a3285abs.htm>.

- [Hus00] **Huskey:2000:HCC**  
 Harry D. Huskey. Hardware components and computer design. In Rojas and Hashagen [RH00], pages 69–87. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- [Hym82a] **Hyman:1982:CBPa**  
 Anthony Hyman. *Charles Babbage, pioneer of the computer*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1982. ISBN 0-19-858170-X. xi + 287 + [33] pp. LCCN QA29.B2 H93 1982b.
- [Hym82b] **Hyman:1982:CBPb**  
 Anthony Hyman. *Charles Babbage, pioneer of the computer*. Princeton University Press, Princeton, NJ, USA, 1982. ISBN 0-691-08303-7. xi + [iv] + 287 + [33] pp. LCCN QA29.B2 H93 1982.
- [Hym88] **Hyman:1988:SRS**  
 Anthony Hyman, editor. *Science and reform: selected works of Charles Babbage*. Cambridge University Press, Cambridge, UK, 1988. ISBN 0-521-34311-9. vii + 356 pp. LCCN QA3.B2 1988. URL <http://www.loc.gov/catdir/description/cam023/88010294.html>.
- [IEE89] **IEEE-SSS:1989:CSP**  
 IEEE Scientific Supercomputer Subcommittee. The computer spectrum: a perspective on the evolution of computing. *Computer*, 22(11):57–63, November 1989. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [Jac83] **Jacobs:1983:SO**  
 John F. Jacobs. SAGE overview. *Annals of the History of Computing*, 5(4):323–329, October/December 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4323.pdf>; <http://www.computer.org/annals/an1983/a4323abs.htm>.
- [Jen90] **Jennings:1990:DFT**  
 Karla Jennings. *The devouring fungus: tales of the computer age*. W. W. Norton & Co., New York, NY, USA, 1990. ISBN 0-393-02897-6. 237 pp. LCCN QA76.9.C66 J46 1990. US\$19.95, CDN\$26.95.
- [Joh83] **Johnston:1983:OCB**  
 Floyd E. Johnston. The one-card binary loader for the IBM 701. *Annals of the History of Computing*, 5(2):133–135, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2133b.pdf>; <http://www.computer.org/annals/an1983/a2133babs.htm>.
- [Jon85] **Jones:1985:VRC**  
 John L. Jones. Viewpoint and reminiscences of the Chair-

- man of CODASYL. *Annals of the History of Computing*, 7(4):313–315, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4304.pdf>; <http://www.computer.org/annals/an1985/a4304abs.htm>.
- Jones:1989:MDT**
- [Jon89] William J. Jones. MGDPS and DSDPS — two stages of an early operating system. *Annals of the History of Computing*, 11(2):99–108, April/June 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a2099.pdf>; <http://www.computer.org/annals/an1989/a2099abs.htm>. [Kes86]
- Juley:1982:BC**
- [Jul82] Joseph Juley. The ballistic computer (1947). In Randell [Ran82], pages 257–261. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- Kawasaki:1990:MW**
- [Kaw90] Guy Kawasaki. *The Macintosh way*. Scott, Foresman, Glenview, IL, USA, 1990. ISBN 0-673-46175-0. xi + 209 pp. LCCN HD9696.C64 A865 1990. US\$19.95. [Kid90a]
- Kessler:1980:ARE**
- [Kes80] Gary C. Kessler. Anecdotes: Recollections of the early days of machine tabulating. *Annals of the History of Computing*, 2(4):373–374, October/December 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4373.pdf>; <http://www.computer.org/annals/an1980/a4373abs.htm>. [Kessler:1986:CPS]
- Kessler:1986:CPS**
- Gary C. Kessler. Comment on previous self-study answer. *Annals of the History of Computing*, 8(1):93, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1089a.pdf>; <http://www.computer.org/annals/an1986/a1089aabs.htm>.
- Kidder:1981:SNM**
- Tracy Kidder. *The Soul of a New Machine*. Little, Brown, Boston, MA, USA, 1981. ISBN 0-316-49170-5. 293 pp. LCCN TK7885.4 .K53 1981. An Atlantic Monthly Press book.
- Kidder:1990:SNM**
- Tracy Kidder. *The Soul of a New Machine*. Avon, New York, NY, USA, 1990. ISBN 0-380-71115-X. 293 pp. LCCN TK7885.4 .K53 1990. First Avon Books Trade Printing; September 1990.
- Kidwell:1990:ASC**
- [Kid90b] Peggy Aldrich Kidwell. American scientists and calculat-

ing machines — from novelty to commonplace. *Annals of the History of Computing*, 12(1):31–40, January/March 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a1031.pdf>; <http://www.computer.org/annals/an1990/a1031abs.htm>. [Kis83]

**Kidder:1997:SNM**

[Kid97] Tracy Kidder. *The Soul of a New Machine*. The modern library of the world's best books. Modern Library, New York, NY, USA, 1997. ISBN 0-679-60261-5, 0-316-20455-2 (e-book). xii + 384 pp. LCCN QA76.17 .K53 1997. Originally published in 1981 by Little Brown and Company.

**Killen:1988:IMC**

[Kil88] Michael Killen. *IBM, the making of the common view*. Harcourt Brace Jovanovich, San Diego, CA, USA, 1988. ISBN 0-15-143480-8. xx + 284 pp. LCCN HD9696.C64 I484751 1988.

**King:1987:MTT**

[Kin87] Margaret King, editor. *Machine translation today: the state of the art: proceedings of the Third Lugano Tutorial, Lugano, Switzerland, 2–7 April 1984*, volume 2 of *Edinburgh information technology series*. Edinburgh University Press, Edinburgh, Scotland, 1987. ISBN 0-85224-519-X. xii + 447 pp.

LCCN P308 .L831 1987. The initial work on this book was done in preparation for a Tutorial on Machine Translation, organised by the Dalle Molle Institute for Semantic and Cognitive Studies.

**Kishi:1983:LLL**

Tad Kishi. 16. the 701 at Lawrence Livermore Laboratory. *Annals of the History of Computing*, 5(2):206–210, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2206b.pdf>; <http://www.computer.org/annals/an1983/a2206babs.htm>.

**Kistermann:1991:IDH**

[Kis91] F. W. Kistermann. The invention and development of the Hollerith punched card: In commemoration of the 130th anniversary of the birth of Herman Hollerith and for the 100th anniversary of large scale data processing. *Annals of the History of Computing*, 13(3):245–259, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3245.pdf>; <http://www.computer.org/annals/an1991/a3245abs.htm>.

**Kistermann:2000:DDT**

[Kis00] Friedrich W. Kistermann. The DEHOMAG D11 tabulator: a milestone in the history of

- data processing. In Rojas and Hashagen [RH00], pages 221–235. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- [KK85] John G. Kemeny and Thomas E. Kurtz. *Back to BASIC: the history, corruption, and future of the language*. Addison-Wesley, Reading, MA, USA, 1985. ISBN 0-201-13433-0 (paperback). x + 141 pp. LCCN QA76.73.B3 K44 1985. US\$12.95.
- [Kle81] Stephen Cole Kleene. Origins of recursive function theory. *Annals of the History of Computing*, 3(1):52–67, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1052.pdf>; <http://www.computer.org/annals/an1981/a1052abs.htm>.
- [Knu84] Donald E. Knuth. FORTRAN implementations (letter). *Annals of the History of Computing*, 6(4):402–403, October/December 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4402.pdf>; <http://www.computer.org/annals/an1984/a4402abs.htm>.
- [Knu86] Donald E. Knuth. The IBM 650: An appreciation from the field. *Annals of the History of Computing*, 8(1):50–55, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1050.pdf>; <http://www.computer.org/annals/an1986/a1050abs.htm>.
- [Koz84a] Wladyslaw Kozaczuk. *Enigma: how the German machine cipher was broken, and how it was read by the Allies in World War Two*. Arms and Armour, London, UK, 1984. ISBN 0-85368-640-8. xiv + 348 pp. LCCN D810.C88 K6813 1984b. Translation of: W kregu Enigmy.
- [Koz84b] Wladyslaw Kozaczuk. *Enigma: how the German machine cipher was broken, and how it was read by the Allies in World War Two*. Foreign intelligence book series. University Publications of America, Frederick, MD, USA, 1984. ISBN 0-89093-547-5. xiv + 348 pp. LCCN D810.C88 K6813 1984. US\$24.00. Translation of: W kregu Enigmy.
- [Kruh89] Louis Kruh. Tales of Yardley: Some sidelights to his career. *Cryptologia*, 13(4):327–??, October 1989. CODEN CRYPE6.



ISSN 0161-1194 (print), 1558-1586 (electronic).

**Klarner:1980:RPM**

- [KT80a] David A. Klarner and H. S. Tropp. Reviews: P. McCorduck: *Machines Who Think*; A. P. Ershov: *The British Lectures*. *Annals of the History of Computing*, 2(3):274–280, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3274.pdf>; <http://www.computer.org/annals/an1980/a3274abs.htm>.

**Knuth:1980:EDP**

- [KT80b] Donald E. Knuth and Luis Trabb Pardo. The early development of programming languages. In Metropolis et al. [MHR80], pages 197–273. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Knuth:1984:CQD**

- [KTW84] Donald E. Knuth, Erwin Tomash, and M. R. Williams. Comments, queries, and debate: FORTRAN implementations; the Madrid promp-tuary; Edouard Lucas vindicated; photo essays. *Annals of the History of Computing*, 6(4):402–405, October/

December 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4402.pdf>; <http://www.computer.org/annals/an1984/a4402abs.htm>.

**Kuntzmann:1990:IUG**

- [Kun90] Jean Kuntzmann. Informatics at the University of Grenoble. *Annals of the History of Computing*, 12(2):91–93, April/June 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2091.pdf>; <http://www.computer.org/annals/an1990/a2091abs.htm>.

**Lesourne:1991:BHF**

- [LA91] J. Lesourne and R. Armand. A brief history of the first decade of SEMA. *Annals of the History of Computing*, 13(4):341–349, October/December 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a4341.pdf>; <http://www.computer.org/annals/an1991/a4341abs.htm>.

**Lange:2000:HHI**

- [Lan00] Thomas Lange. Helmut Hoelzer: inventor of the electronic analog computer. In Rojas and Hashagen [RH00], pages 323–348. ISBN 0-262-18197-5 (hard-cover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.

- [Lav80a] **Lavington:1980:CDM**  
 S. H. Lavington. Computer development at Manchester University. In Metropolis et al. [MHR80], pages 433–443. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- [Lav80b] **Lavington:1980:EBCa**  
 S. H. (Simon Hugh) Lavington. *Early British computers: the story of vintage computers and the people who built them*. Manchester University Press, Manchester, UK, 1980. ISBN 0-7190-0803-4 (hardcover), 0-7190-0810-7 (paperback). 139 pp. LCCN TK7885.A5 L38 1980b. UK£7.95.
- [Lav80c] **Lavington:1980:EBCb**  
 S. H. (Simon Hugh) Lavington. *Early British computers: the story of vintage computers and the people who built them*. Digital Press, 12 Crosby Drive, Bedford, MA 01730, USA, 1980. ISBN 0-932376-08-8 (paperback). 139 pp. LCCN TK7885.A5 .L38 1980. US\$8.00.
- [Lay89] **Layer:1989:MHP**  
 Harold A. Layer. Microcomputer history and prehistory — an archaeological beginning. *Annals of the History of Computing*, 11(2):127–130, April/
- [LB81] **Lee:1981:RMA**  
 J. A. N. Lee and Hal Berghel. Reviews: N. Metropolis, et al.: A History of Computing in The Twentieth Century; capsule reviews. *Annals of the History of Computing*, 3(2):193–208, April/June 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a2127.pdf>; <http://www.computer.org/annals/an1989/a2127abs.htm>.
- [Lea05] **Leavitt:2005:MWK**  
 David Leavitt. *The man who knew too much: Alan Turing and the invention of the computer*. Great discoveries. W. W. Norton & Co., New York, NY, USA, 2005. ISBN 0-393-05236-2 (hardcover). 319 pp. LCCN QA29.T8 L43 2005. URL <ftp://uiarchive.cso.uiuc.edu/pub/etext/gutenberg/>; <http://www.loc.gov/catdir/toc/ecip0514/2005018034.html>.
- [Lec90] **Leclerc:1990:GGB**  
 Bruno Leclerc. From Gamma 2 to Gamma E.T.: The birth of electronic computing at Bull. *Annals of the History of Computing*, 12(1):5–22, January/
- June 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a2127.pdf>; <http://www.computer.org/annals/an1989/a2127abs.htm>.

- March 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a1005.pdf>; <http://www.computer.org/annals/an1990/a1005abs.htm>. [Lee84a]
- Ledger:1982:CE**
- [Led82a] Marshall Ledger. The case of the ENIAC. *Pennsylvania Gazette*, ??(??):30–35, October 1982. CODEN ???? ISSN ????
- Ledger:1982:EMH**
- [Led82b] Marshall Ledger. The ENIAC's muddled history. *Pennsylvania Gazette*, ??(??):29–33, November 1982. CODEN ???? ISSN ????
- Ledger:1983:LEa**
- [Led83a] Marshall Ledger. Letters [on the ENIAC]. *Pennsylvania Gazette*, ??(??):3–4, February 1983. CODEN ???? ISSN ????
- Ledger:1983:LEb**
- [Led83b] Marshall Ledger. Letters [on the ENIAC]. *Pennsylvania Gazette*, ??(??):8, April 1983. CODEN ???? ISSN ????
- Ledger:1983:LEc**
- [Led83c] Marshall Ledger. Letters [on the ENIAC]. *Pennsylvania Gazette*, ??(??):6–8, May 1983. CODEN ???? ISSN ????
- Ledger:1983:LEd**
- [Led83d] Marshall Ledger. Letters [on the ENIAC]. *Pennsylvania Gazette*, ??(??):12, June 1983. CODEN ???? ISSN ????
- Lee:1984:ABF**
- J. A. N. Lee. An annotated bibliography of FORTRAN. *Annals of the History of Computing*, 6(1):49–58, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1049.pdf>; <http://www.computer.org/annals/an1984/a1049abs.htm>.
- Lee:1984:PD**
- J. A. N. Lee. Pioneer Day, 1982. *Annals of the History of Computing*, 6(1):7–14, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1007.pdf>; <http://www.computer.org/annals/an1984/a1007abs.htm>.
- Leeson:1984:IFE**
- [Lee84c] Daniel N. Leeson. IBM FORTRAN exhibit and film. *Annals of the History of Computing*, 6(1):41–48, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1041.pdf>; <http://www.computer.org/annals/an1984/a1041abs.htm>.
- Lee:1985:SIC**
- J. A. N. Lee. Special issue, COBOL: 25th Anniversary: Introduction. *Annals of the History of Comput-*

- ing*, 7(4):286–287, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4286.pdf>; <http://www.computer.org/annals/an1985/a4286abs.htm>.
- Lee:1986:WPF**
- [Lee86] Marshall M. Lee. *Winning with People: The First 40 Years of Tektronix*. Tektronix, Beaverton, OR, USA, 1986. xv + 323 pp. LCCN HD9696.E54T43 1986.
- Lee:1987:AIa**
- [Lee87a] J. A. N. Lee. About this issue. *Annals of the History of Computing*, 9(2):111–112, April/June 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a2111.pdf>; <http://www.computer.org/annals/an1987/a2111abs.htm>.
- Lee:1987:AIb**
- [Lee87b] J. A. N. Lee. About this issue. *Annals of the History of Computing*, 9(3/4):219–220, July/September 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3219.pdf>; <http://www.computer.org/annals/an1987/a3219abs.htm>.
- Lee:1987:HCB**
- [Lee87c] John A. N. Lee. Hap- penings: The code-breaking computers of 1944. *Annals of the History of Computing*, 9(3/4):354–356, July/September 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3345.pdf>; <http://www.computer.org/annals/an1987/a3345abs.htm>.
- Lee:1988:AIa**
- [Lee88a] J. A. N. Lee. About this issue. *Annals of the History of Computing*, 10(1):1–2, January/March 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1001.pdf>; <http://www.computer.org/annals/an1988/a1001abs.htm>.
- Lee:1988:AIb**
- [Lee88b] J. A. N. Lee. About this issue. *Annals of the History of Computing*, 10(2):103, April/June 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a2103.pdf>; <http://www.computer.org/annals/an1988/a2103abs.htm>.
- Lee:1988:AIc**
- [Lee88c] J. A. N. Lee. About this issue. *Annals of the History of Computing*, 10(3):157–158, July/September 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a3157.pdf>; <http://www.computer.org/annals/an1988/a3157abs.htm>.

- org/annals/an1988/a3157abs.htm.
- Lee:1988:AIId**
- [Lee88d] J. A. N. Lee. About this issue. *Annals of the History of Computing*, 10(4):235–239, October/December 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4235.pdf>; <http://www.computer.org/annals/an1988/a4235abs.htm>.
- Lee:1989:AIa**
- [Lee89a] J. A. N. Lee. About this issue. *Annals of the History of Computing*, 11(1):1–2, January/March 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a1001.pdf>; <http://www.computer.org/annals/an1989/a1001abs.htm>.
- Lee:1989:AIb**
- [Lee89b] J. A. N. Lee. About this issue. *Annals of the History of Computing*, 11(2):67–68, April/June 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a2067.pdf>; <http://www.computer.org/annals/an1989/a2067abs.htm>.
- Lee:1989:AIc**
- [Lee89c] J. A. N. Lee. About this issue. *Annals of the History of Computing*, 11(3):159, July/September 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3159.pdf>; <http://www.computer.org/annals/an1989/a3159abs.htm>.
- Lee:1989:AIId**
- [Lee89d] J. A. N. Lee. About this issue. *Annals of the History of Computing*, 11(4):235, October/December 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4235.pdf>; <http://www.computer.org/annals/an1989/a4235abs.htm>.
- Lee:1989:H**
- [Lee89e] J. A. N. Lee. Happenings. *Annals of the History of Computing*, 11(4):319–321, October/December 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4319.pdf>; <http://www.computer.org/annals/an1989/a4319abs.htm>.
- Lee:1990:AIb**
- [Lee90a] J. A. N. Lee. About this issue. *Annals of the History of Computing*, 12(2):77, April/June 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2077.pdf>; <http://www.computer.org/annals/an1990/a2077abs.htm>.

- [Lee90b] Lee:1990:AIc J. A. N. Lee. About this issue. *Annals of the History of Computing*, 12(3):157, July/September 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a3157.pdf>; <http://www.computer.org/annals/an1990/a3157abs.htm>. [Lee90f]
- [Lee90c] Lee:1990:AIId J. A. N. Lee. About this issue. *Annals of the History of Computing*, 12(4):217–218, October/December 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4217.pdf>; <http://www.computer.org/annals/an1990/a4217abs.htm>. See corrections [Wei91a]. [Lee90g]
- [Lee90d] Lee:1990:Ha J. A. N. Lee. Happenings. *Annals of the History of Computing*, 12(1):51–55, January/March 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a1051.pdf>; <http://www.computer.org/annals/an1990/a1051abs.htm>. [Lee90h]
- [Lee90e] Lee:1990:Hb J. A. N. Lee. Happenings. *Annals of the History of Computing*, 12(2):127–128, April/June 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2127.pdf>; <http://www.computer.org/annals/an1990/a2127abs.htm>. [Lee90i]
- [Lee90f] Lee:1990:Hc J. A. N. Lee. Happenings. *Annals of the History of Computing*, 12(3):199–203, July/September 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a3199.pdf>; <http://www.computer.org/annals/an1990/a3199abs.htm>. [Lee90j]
- [Lee90g] Lee:1990:Hd J. A. N. Lee. Happenings. *Annals of the History of Computing*, 12(4):261–264, October/December 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4261.pdf>; <http://www.computer.org/annals/an1990/a4261abs.htm>. [Lee90k]
- [Lee90h] Lee:1990:AIa John A. N. Lee. About this issue. *Annals of the History of Computing*, 12(1):1, January/March 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a1001.pdf>; <http://www.computer.org/annals/an1990/a1001abs.htm>. [Lee90l]

- [Lee91a] Lee:1991:AIa J. A. N. Lee. About this issue. *Annals of the History of Computing*, 13(1):1–2, January/March 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1001.pdf>; <http://www.computer.org/annals/an1991/a1001abs.htm>.
- [Lee91b] Lee:1991:AIb J. A. N. Lee. About this issue. *Annals of the History of Computing*, 13(2):123–124, April/June 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2123.pdf>; <http://www.computer.org/annals/an1991/a2123abs.htm>.
- [Lee91c] Lee:1991:AIc J. A. N. Lee. About this issue. *Annals of the History of Computing*, 13(3):235, July/September 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3235.pdf>; <http://www.computer.org/annals/an1991/a3235abs.htm>.
- [Lee91d] Lee:1991:AIId J. A. N. Lee. About this issue. *Annals of the History of Computing*, 13(4):315–316, October/December 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a4315.pdf>; <http://www.computer.org/annals/an1991/a4315abs.htm>.
- [Lee91e] Lee:1991:ASS J. A. N. Lee. Answers to self-study questions. *Annals of the History of Computing*, 13(1):117–120, January/March 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1088.pdf>; <http://www.computer.org/annals/an1991/a1088abs.htm>.
- [Lee91f] Lee:1991:CQD J. A. N. Lee. Comments, queries, and debate: Reply to Burks and Burks on the Atanasoff award. *Annals of the History of Computing*, 13(3):308, July/September 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3306.pdf>; <http://www.computer.org/annals/an1991/a3306abs.htm>.
- [Lee91g] Lee:1991:GDS J. A. N. Lee. Guidelines for the documentation of segments of the history of computing. *Annals of the History of Computing*, 13(1):51–62, January/March 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1051.pdf>; <http://www.computer.org/annals/an1991/a1051abs.htm>.

- org/annals/an1991/a1051abs.htm.
- Lee:1991:Ha**
- [Lee91h] J. A. N. Lee. Happenings. *Annals of the History of Computing*, 13(1):81–88, January/March 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1081.pdf>; <http://www.computer.org/annals/an1991/a1081abs.htm>. [Lev84]
- Lee:1991:SSQ**
- [Lee91i] J. A. N. Lee. Self-study questions. *Annals of the History of Computing*, 13(1):88–90, January/March 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1088.pdf>; <http://www.computer.org/annals/an1991/a1088abs.htm>. [Lev85]
- Lee:1991:Hb**
- [Lee91j] John A. N. Lee. Happenings. *Annals of the History of Computing*, 13(2):223–227, April/June 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2223.pdf>; <http://www.computer.org/annals/an1991/a2223abs.htm>. [LH86]
- Lehmer:1980:HSP**
- [Leh80] D. H. Lehmer. A history of the sieve process. In Metropolis et al. [MHR80], pages 445–456. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- Levy:1984:HHC**
- Steven Levy. *Hackers: heroes of the computer revolution*. Anchor Press/Doubleday, Garden City, NY, USA, 1984. ISBN 0-385-19195-2. xv + 458 pp. LCCN QA76.6 .L469 1984. US\$17.95.
- Levy:1985:HHC**
- Steven Levy. *Hackers: heroes of the computer revolution*. Dell, New York, NY, USA, 1985. ISBN 0-440-13405-6 (paperback). 448 pp. LCCN QA76.6 .L469 1985. US\$4.50.
- Learson:1986:IL**
- T. V. Learson and C. C. Hurd. IBM letter #4396. *Annals of the History of Computing*, 8(1):8–9, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1008b.pdf>; <http://www.computer.org/annals/an1986/a1008babs.htm>.
- Lindgren:1987:GFD**
- [Lin87] Michael Lindgren. *Glory and failure: the difference engines of Johann Müller, Charles Babbage and Georg and Edvard Scheutz*. Stockholm



papers in history and philosophy of technology 2017. Dept. of Technology and Social Change, Linköping University, Linköping, Sweden, 1987. ISBN 91-7870-146-5. 415 pp. LCCN QA76.2.A2 L51 1987. Originally presented as the author's doctoral thesis, Linköping University, 1987.

**Lindgren:1990:GFD**

[Lin90]

Michael Lindgren. *Glory and failure: the difference engines of Johann Müller, Charles Babbage and Georg and Edvard Scheutz*. MIT Press series in the history of computing. MIT Press, Cambridge, MA, USA, 1990. ISBN 0-262-12146-8. 414 pp. LCCN QA75 .L493 1990.

**Lindsay:1997:BC**

[LJWH97]

Charles Lindsay, Derek Jacobi, Hugh Whitmore, and Andrew Hodges. *Breaking the code*, 1997. ISBN 1-56442-662-9. Based on the play of the same title by Hugh Whitmore, and on the book, "Alan Turing: the enigma", by Andrew Hodges. Originally broadcast as an episode of the PBS television series, *Mobil masterpiece theatre Credits: Director of photography, Robin Vidgeon ; editor, Laurence Mery-Clark ; introduced by Russell Baker Performers: Derek Jacobi, Alun Armstrong, Richard Johnson, Harold Pinter, Amanda Root, Prunella Scales The story of Alan Turing, British mathemat-*

[LK87]

ical genius and designer of the computer that broke the German Enigma code during World War II, whose admittance to homosexuality at a time when it was illegal presented problems for him, for his family, for his colleagues, and for the State's preoccupation with national security Close-captioned.

**Lonergan:1987:DBS**

William Lonergan and Paul King. Design of the B 5000 system. *Annals of the History of Computing*, 9(1):16–22, January/March 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1016.pdf>; <http://www.computer.org/annals/an1987/a1016abs.htm>.

**Luebbert:1981:MRC**

[LP81]

William F. Luebbert and Deirdre La Porte. Meetings in retrospect: Commemoration of 7940 remote computing demonstration by Stibitz; science and technology studies: Toronto 1980. *Annals of the History of Computing*, 3(1):68–71, January/March 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1068.pdf>; <http://www.computer.org/annals/an1981/a1068abs.htm>.

**LaPorte:1982:EGA**

[LS82]

Deirdre La Porte and George R. Stibitz. Eloge: E. G.

- Andrews, 1898–1980. *Annals of the History of Computing*, 4(1):4–5, January/March 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1004.pdf>; <http://www.computer.org/annals/an1982/a1004abs.htm>. [LTC+81]
- [LS83] D. W. Ladd and J. W. Sheldon. The numerical solution of a partial differential equation on the IBM Type 701 electronic data processing machine. *Annals of the History of Computing*, 5(2):142–145, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2142b.pdf>; <http://www.computer.org/annals/an1983/a2142babs.htm>. [Ladd:1983:NSP]
- [LT84] J. A. N. Lee and Henry S. Tropp. About this issue. *Annals of the History of Computing*, 6(1):3–4, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1003.pdf>; <http://www.computer.org/annals/an1984/a1003abs.htm>. [Lee:1984:AI] [Lub91]
- [LT89] Dorothy B. Lilley and Ronald W. Trice. *A history of information science, 1945–1985*. Library and information science. Academic Press, New York, NY, USA, 1989. ISBN 0-12-450060-9. xv + 181 pp. LCCN Z721.L6431 1989. [Lilley:1989:HIS] [Lud82]
- George Ledin, Jr., Henry S. Tropp, Paul Ceruzzi, Martin Campbell-Kelly, and K. W. Smillie. Reviews: J. G. Santemasas: *Obra e Inventos de Torres Quevedo*; C. Evans: *Pioneers of Computing*; N. Metropolis, et al.: *A History of Computing in the Twentieth Century*; capsule reviews. *Annals of the History of Computing*, 3(4):416–430, October/December 1981. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a4416.pdf>. [Ledín:1981:RJG]
- Steven Lubar. Review: Vincenti: *What engineers know and how they know it: Analytical studies from aeronautical history*. *Annals of the History of Computing*, 13(3):312–313, July/September 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3308.pdf>; <http://www.computer.org/annals/an1991/a3308abs.htm>. [Lubar:1991:RVW]
- Percy E. Ludgate. On a proposed Analytical Machine (1909). In Randell [Ran82],

pages 73–87. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.

**Lukoff:1979:DBP**

- [Luk79] Herman Lukoff. *From dits to bits: a personal history of the electronic computer*. Robotics Press, Portland, OR, USA, 1979. ISBN 0-89661-002-0. xvi + 219 pp. LCCN TK7885.22.L84 A33.

**Luke:1983:R**

- [Luk83] John W. Luke. Recollections. *Annals of the History of Computing*, 5(2):173, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2173a.pdf>; <http://www.computer.org/annals/an1983/a2173aabs.htm>.

**Lukaszewicz:1990:BCD**

- [Luk90] Leon Lukaszewicz. On the beginnings of computer development in Poland. *Annals of the History of Computing*, 12(2):103–107, April/June 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2103.pdf>; <http://www.computer.org/annals/an1990/a2103abs.htm>. See correction [BC90].

**Lundstrom:1987:FGM**

- [Lun87] David E. Lundstrom. *A few good men from Univac*. MIT Press series in the history of computing. MIT Press, Cambridge,

MA, USA, 1987. ISBN 0-262-12120-4. xii + 227 + [18] pp. LCCN QA76.8.U6 L861 1987.

**MacHale:1983:GBH**

- [Mac83] Des MacHale. *George Boole: his life and work*, volume 2 of *Profiles of genius series*. Boole Press, Dublin, Ireland, 1983. ISBN 0-906783-14-3 (paperback), 0-906783-05-4. ISSN 0332-3218. xiii + 304 pp. LCCN QA29.B685 M331 1983. UK£16.00.

**MacKenzie:1987:ASS**

- [Mac87] F. B. MacKenzie. Automated secondary storage management. *Annals of the History of Computing*, 9(1):29–35, January/March 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1029.pdf>; <http://www.computer.org/annals/an1987/a1029abs.htm>.

**MacKenzie:1991:IAL**

- [Mac91] Donald MacKenzie. The influence of the Los Alamos and Livermore National Laboratories on the development of supercomputing. *Annals of the History of Computing*, 13(2):179–201, April/June 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2179.pdf>; <http://www.computer.org/annals/an1991/a2179abs.htm>.

- [Mac92a] **Macrae:1992:JNS**  
 Norman Macrae. *John von Neumann: the scientific genius who pioneered the modern computer, game theory, nuclear deterrence, and much more*. American Mathematical Society, Providence, RI, USA, 1992. ISBN 0-8218-2064-8, 0-8218-2676-X. ix + 405 pp. LCCN 01.50.
- [Mac92b] **Macrae:1992:JNSb**  
 Norman Macrae. *John von Neumann: The Scientific Genius Who Pioneered the Modern Computer, Game Theory, Nuclear Deterrence, and Much More*. American Mathematical Society, Providence, RI, USA, 1992. ISBN 0-8218-2064-8, 0-8218-2676-X. x + 405 pp. LCCN 01.50.
- [Mac99] **Macrae:1999:JNS**  
 Norman Macrae. *John von Neumann: the scientific genius who pioneered the modern computer, game theory, nuclear deterrence, and much more*. American Mathematical Society, Providence, RI, USA, 1999. ISBN 0-8218-2064-8. x + 405 pp. LCCN QA29.V66 M334 1999. Originally published in [Mac92b].
- [Mah88] **Mahoney:1988:HCH**  
 Michael S. Mahoney. The history of computing in the history of technology. *Annals of the History of Computing*, 10(2):113–125, April/June 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a2113.pdf>; <http://www.computer.org/annals/an1988/a2113abs.htm>.
- [Mah00] **Mahoney:2000:SC**  
 Michael S. Mahoney. The structures of computation. In Rojas and Hashagen [RH00], pages 17–32. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- [Mai88] **Maier:1988:TYC**  
 John H. Maier. Thirty years of computer science developments in the People's Republic of China: 1956–1985. *Annals of the History of Computing*, 10(1):19–34, January/March 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1019.pdf>; <http://www.computer.org/annals/an1988/a1019abs.htm>.
- [Mar80] **Marczynski:1980:FSY**  
 R. W. Marczyński. The first seven years of Polish digital computers. *Annals of the History of Computing*, 2(1):37–48, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1037.pdf>; <http://www.computer.org/annals/an1980/a1037abs.htm>. See minor correction [Ano80c].

**Marks:1982:JCC**

- [Mar82] Shirley L. Marks. JOSS: Conversational computing for the nonprogrammer. *Annals of the History of Computing*, 4(1):35–52, January/March 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1035.pdf>; <http://www.computer.org/annals/an1982/a1035abs.htm>. [Mau80]

**Marling:1990:MMK**

- [Mar90] William Marling. Maestro of many keyboards. *Case Alumnus*, Spring/Summer 1990. CODEN ???? ISSN ???? A brief biography of Donald Knuth. [Mau82a]

**Mason:1983:ITC**

- [Mas83] Daniel R. Mason. 1. the 701 in the IBM Technical Computing Bureau. *Annals of the History of Computing*, 5(2):176–177, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2176.pdf>; <http://www.computer.org/annals/an1983/a2176abs.htm>. [Mau82b]

**Masani:1990:NW**

- [Mas90] Pesi Rustom Masani. *Norbert Wiener, 1894–1964*, volume 5 of *Vita mathematica*. Birkhäuser Verlag, Basel, Switzerland, 1990. ISBN 0-8176-2246-2. 416 pp. LCCN QA29.W497 M37 1990.

**Mauchly:1980:E**

John M. Mauchly. The ENIAC. In Metropolis et al. [MHR80], pages 541–550. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Mauchly:1982:PPE**

John W. Mauchly. Preparation of problems for EDVAC-type machines (1947). In Randell [Ran82], pages 393–397. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.

**Mauchly:1982:UHS**

John W. Mauchly. The use of high speed vacuum tube devices for calculating (1942). In Randell [Ran82], pages 355–358. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.

**Mauchly:1984:JME**

Kathleen R. Mauchly. John Mauchly's early years. *Annals of the History of Computing*, 6(2):116–138, April/June 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2116.pdf>; <http://www.computer.org/annals/an1984/a2116abs.htm>. Foreword by Eric A. Weiss.

- [Mau89] **Maulucci:1989:H**  
 Ruth Maulucci. Happenings. *Annals of the History of Computing*, 11(3):203–206, July/September 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3203.pdf>; <http://www.computer.org/annals/an1989/a3203abs.htm>. [McC83a]
- [May80] **May:1980:HPC**  
 Kenneth O. May. Historiography: a perspective for computer scientists. In Metropolis et al. [MHR80], pages 11–18. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976. [McC83b]
- [MB80] **Mapstone:1980:MRF**  
 Bobbi Mapstone and Morton I. Bernstein. Meetings in retrospect: The founding of SHARE, NCC’80 Pioneer Day. *Annals of the History of Computing*, 2(4):363–372, October/December 1980. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4363.pdf>; <http://www.computer.org/annals/an1980/a4363abs.htm>. [McC83c]
- [McC79] **McCorduck:1979:MWT**  
 Pamela McCorduck. *Machines who think: a personal inquiry into the history and prospects of artificial intelligence*. W. H. Freeman, New York, NY, USA, 1979. ISBN 0-7167-1072-2, 0-7167-1135-4 (paperback). xiv + 375 pp. LCCN Q335 .M23 1979. [McClelland:1983:AAS]
- McClelland:1983:AAS**  
 William F. McClelland. Activities of the Applied Science Mathematical Committee on the 701. *Annals of the History of Computing*, 5(2):125–127, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2125b.pdf>; <http://www.computer.org/annals/an1983/a2125babs.htm>.
- McClelland:1983:FDA**  
 William F. McClelland. Further developments in assembly programs. *Annals of the History of Computing*, 5(2):132, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2132.pdf>; <http://www.computer.org/annals/an1983/a2132abs.htm>.
- McClelland:1983:RA**  
 William F. McClelland. Remarks on assemblers. *Annals of the History of Computing*, 5(2):117, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2117.pdf>; <http://www.computer.org/annals/an1983/a2117abs.htm>.

- org/annals/an1983/a2117abs.htm.
- [McC83d] William F. McClelland. Report of 10/18/51 conference on checking with von Neumann. *Annals of the History of Computing*, 5(2):153–154, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2153.pdf>; <http://www.computer.org/annals/an1983/a2153abs.htm>.
- [McC83e] William F. McClelland. A tracing program subordinate to the given program. *Annals of the History of Computing*, 5(2):127–131, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2127.pdf>; <http://www.computer.org/annals/an1983/a2127abs.htm>.
- [McC83f] Thomas E. McCool. 4. NSA's Defense Calculator, 1952–1953. *Annals of the History of Computing*, 5(2):186–187, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2186.pdf>; <http://www.computer.org/annals/an1983/a2186abs.htm>.
- [McC84] Daniel D. McCracken. The early history of FORTRAN publications. *Annals of the History of Computing*, 6(1):33–34, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1028.pdf>; <http://www.computer.org/annals/an1984/a1028abs.htm>.
- [McC91] Paul McConnell. Some early computers for aviators. *Annals of the History of Computing*, 13(2):155–177, April/June 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2155.pdf>; <http://www.computer.org/annals/an1991/a2155abs.htm>.
- [McC01] Scott McCartney. *ENIAC: the Triumphs and Tragedies of the World's First Computer*. Berkley Books, New York, NY, USA, 2001. ISBN 0-425-17644-4. vii + 262 pp. LCCN QA76.5.
- [McM84] A. Michal (Adrian Michal) McMahon. *The making of a profession: a century of electrical engineering in America*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1984.

ISBN 0-87942-173-8. xv + 304 pp. LCCN TK23 .M391 1984.

**McNeil:1990:EHT**

- [McN90] Ian McNeil. *An Encyclopaedia of the History of Technology*. Routledge & Kegan Paul, London, UK and New York, NY, USA, 1990. ISBN 0-415-01306-2. xv + 1062 pp. LCCN T15 .E53 1990.

**McNeil:1996:EHT**

- [McN96] Ian McNeil. *An Encyclopaedia of the History of Technology*. Routledge & Kegan Paul, London, UK and New York, NY, USA, 1996. ISBN 0-415-14792-1. xv + 1062 pp. LCCN T15 .E53 1996.

**McPherson:1942:MOP**

- [McP42] J. C. McPherson. Mathematical operations with punched cards. *Journal of the American Statistical Association*, 37(??):275–281, June 1942. CODEN JSTNAL. ISSN 0162-1459 (print), 1537-274X (electronic). Reprinted in *Annals of the History of Computing*, 7(4), October 1985, 368–371.

**McPherson:1984:ECC**

- [McP84] John C. McPherson. Early computers and computing institutions. *Annals of the History of Computing*, 6(1):15–16, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1015.pdf>; <http://www.computer.org/annals/an1984/a1015abs.htm>.

[Med88]

<http://dlib.computer.org/annals/an1984/a1015abs.htm>.

**Medwick:1988:DHE**

Paul A. Medwick. Douglas Hartree and early computations in quantum mechanics. *Annals of the History of Computing*, 10(2):105–111, April/June 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a2105.pdf>; <http://www.computer.org/annals/an1988/a2105abs.htm>.

**Merrifield:1982:RCL**

[Mer82]

C. W. Merrifield. Report of the committee, consisting of Professor Cayley, Dr. Farr, Mr. J. W. L. Glaisher, Dr. Pole, Professor Fuller, Professor A. B. W. Kennedy, Professor Clifford, and Mr. C. W. Merrifield, appointed to consider the advisability and to estimate the expense of constructing Mr. Babbage's Analytical Machine, and of printing tables by its means (1879). In Randell [Ran82], pages 55–65. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.

**Metropolis:1980:M**

[Met80]

N. Metropolis. The MANIAC. In Metropolis et al. [MHR80], pages 457–464. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference



on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Metropolis:1980:HCT**

- [MHR80] Nicholas Metropolis, Jack Howlett, and Gian-Carlo Rota, editors. *A History of Computing in the Twentieth Century: a Collection of Essays*. Academic Press, New York, NY, USA, 1980. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Metropolis:1985:HCT**

- [MHR85] N. Metropolis, J. Howlett, and Gian Carlo Rota. *A history of computing in the twentieth century: a collection of essays with an introductory essay and indexes*. Academic Press, New York, NY, USA, revised edition, 1985. ISBN 0-12-491650-3. xx + 693 pp. LCCN QA75.5 .I63 1976b.

**McPherson:1982:LSG**

- [MHS82] John C. McPherson, Frank E. Hamilton, and Robert R. Seiber, Jr. A large-scale, general-purpose electronic digital calculator: The SSEC. *Annals of the History of Computing*, 4(4):313–326, October/December 1982. CODEN AH-COE5. ISSN 0164-1239. URL

<http://dlib.computer.org/an/books/an1982/pdf/a4313.pdf>; <http://www.computer.org/annals/an1982/a4313abs.htm>.

**Maulucci:1987:HEA**

[MHW87] Ruth A. Maulucci, Harry D. Huskey, and Maurice V. Wilkes. Happenings: ENIAC 40th Anniversary; Celebration at the Moore School; Eckert at the Computer Museum. *Annals of the History of Computing*, 9(2):199–202, April/June 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a2199.pdf>; <http://www.computer.org/annals/an1987/a2199abs.htm>.

**Milligan:1985:BDP**

[Mil85] Margaret Milligan. Biographies: Data processing digest: Thirty years before the masthead. *Annals of the History of Computing*, 7(3):245–250, July/September 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a3245.pdf>; <http://www.computer.org/annals/an1985/a3245abs.htm>.

**Mills:1986:CQD**

[Mil86] Roger L. Mills. Comments, queries, and debate: Los Angeles ACM Chapter. *Annals of the History of Computing*, 8(2):198, April/June 1986. CODEN AH-COE5. ISSN 0164-1239. URL

- <http://dlib.computer.org/an/books/an1986/pdf/a2198.pdf>; <http://www.computer.org/annals/an1986/a2198abs.htm>. [MK90a]
- Morris:1984:EPP**
- [MJ84] F. L. Morris and C. B. Jones. An early program proof by Alan Turing. *Annals of the History of Computing*, 6(2):139–143, April/June 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2139.pdf>; <http://www.computer.org/annals/an1984/a2139abs.htm>. [MK90b]
- Mounier-Kuhn:1989:BWW**
- [MK89a] Pierre E. Mounier-Kuhn. Bull: a world-wide company born in Europe. *Annals of the History of Computing*, 11(4):279–297, October/December 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4279.pdf>; <http://www.computer.org/annals/an1989/a4279abs.htm>. [MK90c]
- Mounier-Kuhn:1989:IBP**
- [MK89b] Pierre E. Mounier-Kuhn. The Institut Blaise-Pascal (1946–1969) from Couffignal’s machine to artificial intelligence. *Annals of the History of Computing*, 11(4):257–261, October/December 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4257.pdf>; <http://www.computer.org/annals/an1989/a4257abs.htm>. [MK90a]
- Mounier-Kuhn:1990:CSU**
- Pierre E. Mounier-Kuhn. Computer sciences at the University of Grenoble. *Annals of the History of Computing*, 12(2):89, April/June 1990. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2089.pdf>; <http://www.computer.org/annals/an1990/a2089abs.htm>. [MK90b]
- Mounier-Kuhn:1990:GIF**
- Pierre-E. Mounier-Kuhn. Genèse de l’informatique en France (1945–1965): Diffusion de l’innovation et transfert de technologie. *Culture Technique*, ??(??):35–46, September 1990. CODEN ????? ISSN 0223-4386. [MK90c]
- Mounier-Kuhn:1990:STE**
- Pierre-E. Mounier-Kuhn. Specifications of twelve early computers made in France. *Annals of the History of Computing*, 12(1):3–4, January/March 1990. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a1003.pdf>; <http://www.computer.org/annals/an1990/a1003abs.htm>. [MK90c]
- McCarthy:1982:CQD**
- [MKR82] John McCarthy, William B. Kehl, and Brian Randell. Comments, queries, and debate: Corrections on Early IBM

- Computers; The Case of the Missing Memoranda. *Annals of the History of Computing*, 4(1):66–67, January/March 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1066.pdf>; <http://www.computer.org/annals/an1982/a1066abs.htm>. [MM80]
- [MKW92] Ernst Martin, Peggy Aldrich Kidwell, and Michael R. Williams. *The calculating machines (Die Rechenmaschinen): their history and development*. Charles Babbage Institute reprint series for the history of computing ; v. 16. Tomash Publishers, Los Angeles, CA, USA, 1992. ISBN 0-262-13278-8. xvii + 367 pp. LCCN QA75 .M3513 1992. Translation of: Die Rechenmaschinen. [MM82]
- [ML87] Ruth A. Maulucci and J. A. N. Lee. Happenings: The 25th Anniversary of Committee X3; The Code-Breaking Computers of 1944. *Annals of the History of Computing*, 9(3/4):345–356, July/September 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3345.pdf>; <http://www.computer.org/annals/an1987/a3345abs.htm>. [MM88]
- [Mink:1980:OBE] Jack Minker and Rita G. Minker. Optimization of Boolean expressions — historical developments. *Annals of the History of Computing*, 2(3):227–238, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3227.pdf>; <http://www.computer.org/annals/an1980/a3227abs.htm>.
- [Meyer:1982:CND] Carl H. Meyer and Stephen M. Matyas. *Cryptography: a new dimension in computer data security: a guide for the design and implementation of secure systems*. John Wiley and Sons, Inc., New York, NY, USA, 1982. ISBN 0-471-04892-5. xxi + 755 pp. LCCN Z103 .M55. US\$39.95 (est.).
- [Maulucci:1987:HAC] Ruth Maulucci and Amy Mastrogiovanni. Happenings: Operating Systems: Some Reflections After a Meeting in Chicago. *Annals of the History of Computing*, 10(3):195–209, July/September 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a3195.pdf>; <http://www.computer.org/annals/an1988/a3195abs.htm>.

- [MM97] **Mandrekar:1997:PNW**  
 V. Mandrekar and Pesi Rustom Masani, editors. *Proceedings of the Norbert Wiener Centenary Congress, 1994: Michigan State University, November 27–December 3, 1994*, volume 52 of *Proceedings of symposia in applied mathematics*. American Mathematical Society, Providence, RI, USA, 1997. ISBN 0-8218-0452-9. ISSN 0160-7634. xlviii + 566 pp. LCCN QA1 .S93 v.52.
- [MN82] **Metropolis:1982:ECA**  
 N. Metropolis and E. C. Nelson. Early computing at Los Alamos. *Annals of the History of Computing*, 4(4):348–357, October/December 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a4348.pdf>; <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4640758>; <http://www.computer.org/annals/an1982/a4348abs.htm>.
- [MN88a] **Maulucci:1988:HAC**  
 Ruth A. Maulucci and Frederik Nebeker. Happenings: The ACM Conference on the History of Scientific and Numeric Computation, Princeton, New Jersey, 13–15 May 1987. *Annals of the History of Computing*, 10(1):69–73, January/March 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1069.pdf>; <http://www.computer.org/annals/an1988/a1069abs.htm>.
- [MN88b] **Maulucci:1988:HCC**  
 Ruth A. Maulucci and Arthur L. Norberg. Happenings: Computing in the 21st Century: A Charles Babbage Institute Symposium. *Annals of the History of Computing*, 10(2):127–132, April/June 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a2127.pdf>; <http://www.computer.org/annals/an1988/a2127abs.htm>.
- [Mol88] **Mollenhoff:1988:AFF**  
 Clark R. (Clark Raymond) Mollenhoff. *Atanasoff: forgotten father of the computer*. Iowa State University Press, Ames, IA, USA, 1988. ISBN 0-8138-0032-3. xv + 274 pp. LCCN QA76.2.A75 M65 1988; QA76.2.A75.M65.
- [Mol89] **Molina:1989:SBM**  
 Alfonso Hernan Molina. *The social basis of the microelectronics revolution*. Edinburgh University Press, Edinburgh, Scotland, 1989. ISBN 0-85224-594-7, 0-85224-605-6 (paperback). 260 pp. LCCN HD9696.A2M65 1989.
- [Moo77] **Moore:1977:ACL**  
 Doris Langley-Levy Moore. *Ada, Countess of Lovelace: Byron's legitimate daughter*. J. Murray, London, UK, 1977.

ISBN 0-7195-3384-8. [13] + 5-397 + [12] pp. LCCN PR4382 .M6. UK£9.50.

**Moreau:1984:CCA**

- [Mor84] Rene Moreau. *The computer comes of age: the people, the hardware, and the software*. MIT Press series in the history of computing. MIT Press, Cambridge, MA, USA, 1984. ISBN 0-262-13194-3. x + 227 pp. LCCN QA76.17 .M6713 1984. Translation of: Ainsi naquit l'informatique.

**Moreau:1986:CQD**

- [Mor86] R. Moreau. Comments, queries, and debate: Author's comment on review. *Annals of the History of Computing*, 8(1):91–92, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1091.pdf>; <http://www.computer.org/annals/an1986/a1091abs.htm>. See highly-critical review in [BSS84].

**McClelland:1983:IW**

- [MP83] W. F. McClelland and D. W. Pendery. 701 installation in the West. *Annals of the History of Computing*, 5(2):167–170, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2167.pdf>; <http://www.computer.org/annals/an1983/a2167abs.htm>.

**McLean:1985:ISa**

- [MR85a] Mick McLean and Thomas Rolands. *The Inmos saga: a triumph of national enterprise*. F. Pinter, London, UK, 1985. ISBN 0-86187-560-5 (paperback), 0-86187-559-1 (cased). 199 pp. LCCN HD9696.A3 G676 1985b. UK£6.95 (paperback), UK£15.00 (cased).

**McLean:1985:ISb**

- [MR85b] Mick McLean and Tom Rowland. *The Inmos saga*. Quorum Books, Westport, CT, USA, 1985. ISBN 0-89930-165-7. 199 pp. LCCN HD9696.A3 G676 1985.

**Masani:1987:WMM**

- [MRFS87] Pesi Masani, Brian Randell, David K. Ferry, and Richard Saeks. The Wiener memorandum on the mechanical solution of partial differential equations. *Annals of the History of Computing*, 9(2):183–197, April/June 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a2183.pdf>; <http://www.computer.org/annals/an1987/a2183abs.htm>.

**Metropolis:1972:TEH**

- [MW72] N. Metropolis and J. Worlton. A trilogy on errors in the history of computing. In AFIPS [AFI72], pages 683–691. LCCN QA76 .U2 1972.

- [MW80] **Metropolis:1980:TEH**  
 N. Metropolis and J. Worton. A trilogy on errors in the history of computing. *Annals of the History of Computing*, 2(1):49–59, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1049.pdf>; <http://www.computer.org/annals/an1980/a1049abs.htm>. An earlier version is published in [MW72].
- [MZ88] **Maulucci:1988:HND**  
 Ruth A. Maulucci and Heinz Zemanek. Happenings: The New Department “Informatics and Automatics” at the Deutsches Museum in Munich. *Annals of the History of Computing*, 10(4):329–335, October/December 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4329.pdf>; <http://www.computer.org/annals/an1988/a4329abs.htm>.
- [Nag80] **Nagler:1980:ANB**  
 Harry Nagler. Anecdotes: Napier and Babbage. *Annals of the History of Computing*, 2(2):186–187, April/June 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a2186a.pdf>; <http://www.computer.org/annals/an1980/a2186aabs.htm>.
- [Nas90] **Nash:1990:HSC**  
 Stephen G. Nash, editor. *A History of Scientific Computing*. Addison-Wesley and ACM Press, Addison-Wesley and New York, NY, USA, 1990. ISBN 0-201-50814-1. xix + 359 pp. LCCN QA76.17 .H59 1990.
- [Nap90] **Napier:1990:R**  
 John Napier. *Rabdology*. Charles Babbage Institute reprint series for the history of computing ; v. 15. Tomash Publishers, Los Angeles, CA, USA, 1990. ISBN 0-262-14046-2. xxxvi + 135 pp. LCCN QA75 .N2713 1990. Translation of Rabdologia.
- [Nap00] **Napper:2000:MMC**  
 R. B. E. Napper. The Manchester Mark 1 computers. In Rojas and Hashagen [RH00], pages 365–377. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- [NHN89] **NGBS:1988:IDC**  
 National Geographic Book Service. *Inventors and discoverers: changing our world*. National Geographic Society, Washington, DC, USA, 1988. ISBN 0-87044-751-3, 0-87044-752-1, 0-87044-753-X. 320 pp. LCCN T18 .I57 1988.
- [NHN89] **Nagy:1989:NOC**  
 Dénes Nagy, Péter Horvath, and Ferenc Nagy. The von Neumann–Ortvay connection.

- Annals of the History of Computing*, 11(3):183–188, July/September 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3183.pdf>; <http://www.computer.org/annals/an1989/a3183abs.htm>. [Nut84]
- Nijholt:1988:CLT**
- [Nij88] Anton Nijholt. *Computers and languages: theory and practice*. Studies in computer science and artificial intelligence ; 4. Elsevier, Amsterdam, The Netherlands, 1988. ISBN 0-444-70463-9. xiii + 482 pp. LCCN QA76.6.N551 1988.
- Nohr:1984:MRF**
- [Noh84] Elliott C. Nohr. Meetings in retrospect; FORTRAN Celebration at IBM Santa Teresa Laboratory; FORTRAN Activities at SHARE 59 Meeting. *Annals of the History of Computing*, 6(1):65–69, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1065.pdf>; <http://www.computer.org/annals/an1984/a1065abs.htm>.
- Norberg:1990:HTC**
- [Nor90] Arthur Norberg. High technology calculation in the early 20th Century: Punched card machinery in business and government. *Technology and Culture*, 31(??):753–779, October 1990. CODEN TECUA3. ISSN 0040-165X (print), 1097-3729 (electronic).
- Nutt:1984:CTA**
- Roy Nutt. Compiler techniques available in 1954. *Annals of the History of Computing*, 6(1):20–22, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1015.pdf>; <http://www.computer.org/annals/an1984/a1015abs.htm>.
- Oblonsky:1980:DRI**
- [Obl80a] J. G. Oblonsky. The development of the Research Institute of Mathematical Machines in Prague. *Annals of the History of Computing*, 2(4):284–??, October/December 1980. CODEN AHCOE5. ISSN 0164-1239.
- Oblonsky:1980:EAS**
- [Obl80b] Jan G. Oblonsky. Eloge: Antonin Svoboda, 1907–1980. *Annals of the History of Computing*, 2(4):284–298, October/December 1980. CODEN AHCOE5. ISSN 0164-1239.
- Osborne:1984:HRF**
- [OD84] Adam Osborne and John Dvorak. *Hypergrowth: the rise and fall of Osborne Computer Corporation*. Idthekethan Pub. Co., Berkeley, CA, USA, 1984. ISBN 0-918347-00-9. xi + 204 pp. LCCN HD9696.C64 O836 1984. US\$19.95.

- [OH84] **Orchard-Hays:1984:HMP**  
 William Orchard-Hays. History of mathematical programming systems. *Annals of the History of Computing*, 6(3):296–312, July/September 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a3296.pdf>; <http://www.computer.org/annals/an1984/a3296abs.htm>. Foreword by George B. Dantzig.
- [Oko00] **Okoma:2000:FJC**  
 Seiichi Okoma. The first Japanese computers and their software simulators. In Rojas and Hashagen [RH00], pages 419–434. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- [OLCJ91] **O'Neill:1991:HSP**  
 Judy O'Neill, J. A. N. Lee, Paul Ceruzzi, and Gail Jennes. Happenings. sumptuous piece of engineering sculpture. Babage stamp issued. fifty years of program-controlled calculating machines. celebration at the Deutsches Museum. people and computers exhibition opens at the computer museum. Deutsches Museum workshop on the technical history of electrical information technology. international congress of history of science. technological competitiveness conference, Center for the History of Electrical Engineering. Adelle and Erwin Tomash Fellowship in the history of information processing new book in progress. *Annals of the History of Computing*, 13(4):353–358, October/December 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a4353.pdf>; <http://www.computer.org/annals/an1991/a4353abs.htm>.
- [Oli87] **Oliphint:1987:OSB**  
 Clark Oliphint. Operating system for the B 5000. *Annals of the History of Computing*, 9(1):23–28, January/March 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1023.pdf>; <http://www.computer.org/annals/an1987/a1023abs.htm>.
- [O'N91] **O'Neill:1991:HAD**  
 Judy O'Neill. Happenings: The 30th anniversary of the Digital Equipment Corporation PDP-1; Fernando J. Corbató receives the ACM's A. M. Turing Award; conferences. *Annals of the History of Computing*, 13(3):273–277, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3273.pdf>; <http://www.computer.org/annals/an1991/a3273abs.htm>.



- [O’N92] **ONeill:1992:HLA**  
 Judy O’Neill. Happenings: List of artifact collectors; The Second ACM SIGPLAN History of Programming Languages Conference (HOPL-II); delay in European History of Computing Conference; IEEE Computer Society Awards [Werner Buchholz, Bob O. Evans, Robert W. Floyd, and Thomas E. Kurtz]; SHOT Special Interest Group: Information, Computing, and Society; Admiral Grace Murray Hopper Scholarship - Society of Women Engineers; IBM Club Böblingen, Germany; Smithsonian Institution Libraries Study Grants. *Annals of the History of Computing*, 14(3):49–52, July/September 1992. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1992/pdf/a3049.pdf>; <http://www.computer.org/annals/an1992/a3049abs.htm>.
- [Otn89] **Otnes:1989:KES**  
 Robert K. Otnes. Keuffel and Esser slide rules. *Historische Bürowelt*, 24:15–21, July 1989. CODEN ???? ISSN ???? In English with a German translation. Available from Internationales Forum Historisches Bürowelt e. V, Postfach 50 11 68, D-5000 Cologne-50, West Germany.
- [OW83] **Oppenheimer:1983:S**  
 J. Robert Oppenheimer and Thomas J. Watson, Jr. Speeches. *Annals of the History of Computing*, 5(2):157–160, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2157.pdf>; <http://www.computer.org/annals/an1983/a2157abs.htm>.
- [PAD82] **Phelps:1982:CQDb**  
 Byron E. Phelps, Isaac L. Auerbach, and Martin Davis. Comments, queries, and debate: Computer Circuit Design in the 1940s; Victor M. Glushkov; Lectures at “Atlanta State”. *Annals of the History of Computing*, 4(4):368–370, October/December 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a4368.pdf>; <http://www.computer.org/annals/an1982/a4368abs.htm>.
- [Pai90] **Pair:1990:CHL**  
 C. Pair. CRIN: The history of a laboratory. *Annals of the History of Computing*, 12(3):159–166, July/September 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a3159.pdf>; <http://www.computer.org/annals/an1990/a3159abs.htm>.
- [PB87] **Pennings:1987:NTO**  
 Johannes M. Pennings and Arend Buitendam. *New technology as organizational innovation: the development and*

- diffusion of microelectronics.* Ballinger series on the management of innovation and change. Ballinger Pub. Co., Cambridge, MA, USA, 1987. ISBN 0-88730-186-X. xvi + 308 pp. LCCN HD45 .N431 1987.
- [PB89] Zenon W. Pylyshyn and Liam Bannon. *Perspectives on the computer revolution.* Ablex Pub. Corp., Norwood, N.J., second edition, 1989. ISBN 0-89391-369-3 (cloth). xv + 550 pp. LCCN QA76.P429 1989.
- [PCJ85] Charles A. Phillips, Joseph F. Cunningham, and John L. Jones. Recollections on the early days of COBOL and CODASYL. *Annals of the History of Computing*, 7(4):304–310, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4304.pdf>; <http://www.computer.org/annals/an1985/a4304abs.htm>.
- [Pea88] Trevor Pearcey. *A history of Australian computing.* Chisholm Institute of Technology, Caulfield East, Victoria, Australia, 1988. ISBN 0-947186-94-8. vi + 192 pp. LCCN ????
- [Pen89] Arno A. Penzias. *Ideas and information: managing in*
- a high-tech world.* Norton, New York, NY, USA, 1989. ISBN 0-393-02649-3. 224 pp. LCCN QA76.9.C66 P46 1989. US\$17.95.
- [Pen90] Arno A. Penzias. *Ideas and information: managing in a high-tech world.* Simon and Schuster, New York, NY, USA, 1990. ISBN 0-671-69196-1. 224 pp. LCCN QA76.9.C66 P46 1990.
- [Per86] Alan J. Perlis. Two thousand words and two thousand ideas — the 650 at Carnegie. *Annals of the History of Computing*, 8(1):42–46, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1042.pdf>; <http://www.computer.org/annals/an1986/a1042abs.htm>.
- [Per87] Judith A. Perrolle. *Computers and social change: information, property, and power.* Wadsworth Publishing Company, Pacific Grove, CA, USA, 1987. ISBN 0-534-07464-2 (paperback). xx + 297 pp. LCCN QA76.9.C66 P47 1987.
- [Pet83] George W. Petrie III. The 701 in the Washington Federal District. *Annals of the History of Computing*, 5(2):172–173,

- April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2172.pdf>; <http://www.computer.org/annals/an1983/a2172abs.htm>. [Phe82]
- [Pet00] Hartmut Petzold. Konrad Zuse and industrial manufacturing of electronic computers in Germany. In Rojas and Hashagen [RH00], pages 315–322. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- [Pet08] Charles Petzold. *The annotated Turing: a guided tour through Alan Turing's historic paper on computability and the Turing Machine*. John Wiley and Sons, Inc., New York, NY, USA, 2008. ISBN 0-470-22905-5 (paperback). xii + 372 pp. LCCN QA267 .P48 2008.
- [Phe80] Byron E. Phelps. Early electronic computer developments at IBM. *Annals of the History of Computing*, 2(3):253–267, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3253.pdf>; <http://www.computer.org/annals/an1980/a3253abs.htm>. See minor correction [Ano80b].
- [Phi81] Norman A. Phillips. Eloge: Jule G. Charney, 1917–1981. *Annals of the History of Computing*, 3(4):308–309, October/December 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a4308.pdf>; <http://www.computer.org/annals/an1981/a4308abs.htm>.
- [Phi82] E. William Phillips. Binary calculation (1963). In Randell [Ran82], pages 303–314. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Phi89] Montgomery Phister, Jr. Quotron II: an early multiprogrammed multiprocessor for the communication of stock market data. *Annals of the History of Computing*, 11(2):109–126, April/June 1989. CODEN AH-COE5. ISSN 0164-1239. URL
- Phelps:1982:CQDa**
- Byron E. Phelps. Comments, queries, and debate: Comment on ENIAC article. *Annals of the History of Computing*, 4(3):284–285, July/September 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3284.pdf>; <http://www.computer.org/annals/an1982/a3284abs.htm>. See [BB81, Ran81, BB82].
- Phillips:1981:EJG**
- Phillips:1982:BC**
- Phister:1989:QIE**
- Petzold:2000:KZI**
- Petzold:2008:ATG**
- Phelps:1980:EEC**

- <http://dlib.computer.org/an/books/an1989/pdf/a2109.pdf>; <http://www.computer.org/annals/an1989/a2109abs.htm>.
- Porter:1983:FEB**
- [Por83] Randall E. Porter. 12. first encounter with the 701 (for Boeing Aircraft). *Annals of the History of Computing*, 5(2):202–204, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2202b.pdf>; <http://www.computer.org/annals/an1983/a2202babs.htm>.
- Palfreman:1991:DME**
- [PS91] Jon Palfreman and Doron Swade. *The Dream machine: exploring the computer age*. BBC Books, London, UK, 1991. ISBN 0-563-36221-9. 208 + 16 pp. LCCN QA76 .P344 1991.
- Pugh:1984:MSI**
- [Pug84] Emerson W. Pugh. *Memories that shaped an industry: decisions leading to IBM System/360*. The MIT Press series in the history of computing. MIT Press, Cambridge, MA, USA, 1984. ISBN 0-262-16094-3. x + 323 pp. LCCN QA76.8.I1015 P83 1984.
- Phister:1986:CQD**
- [PV86] Montgomery Phister, Jr. and Edward W. Ver Hoef. Comments, queries, and debate: EDSAC Program; Memories of the 650. *Annals of the History of Computing*, 8(4):374–375, October/December 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4374.pdf>; <http://www.computer.org/annals/an1986/a4374abs.htm>.
- Peters:1982:SEL**
- [PW82] Thomas J. Peters and Robert H. Waterman. *In search of excellence: lessons from America's best-run companies*. Harper & Row, New York, NY, USA, 1982. ISBN 0-06-015042-4. xxvi + 360 pp. LCCN HD70.U5 .P424 1982. US\$19.95.
- Peters:1984:BEL**
- [PW84a] Thomas J. Peters and Robert H. Waterman. *En busca de la excelencia: lecciones de las empresas mejor gestionadas de Estados Unidos*. Plaza y Janes, Barcelona, Spain, 1984. ISBN 84-85902-88-2. xxxiii + 373 pp. LCCN HD70.U5 P423 1984.
- Peters:1984:SEL**
- [PW84b] Thomas J. Peters and Robert H. Waterman. *In search of excellence: lessons from America's best-run companies*. Warner Books, New York, NY, USA, 1984. ISBN 0-446-37844-5 (paperback). xxiv + 360 pp. LCCN HD70.U5 P424 1984.
- Peters:1985:SE**
- [PW85] Thomas J. Peters and Robert H. Waterman. *In search of excellence*, 1985. Originally shown on

- public television. Credits: Produced by John Nathan and Sam Tyler. Discusses management strategies of some of America's most successful companies. The program covers three main topics: corporate values (examples from IBM and Disney World), innovation (examples from 3M and Apple), and people—customers and employees (examples from Stew Leonard's Dairy, North American Tool and Die, Dana and McDonald's).
- [PW86] **Peters:1986:VPE**  
Thomas J. Peters and Robert H. Waterman. *V poiskakh effektivnogo upravleniia: opyt luchshikh kompanii*. Progress, Moskva, USSR, 1986. 418 pp. LCCN ????
- [PWA92] **Peters:1992:SEL**  
Thomas J. Peters, Robert H. Waterman, and Nancy Austin. *In search of excellence: lessons from America's best-run companies*. Quality Paperback Book Club, ????, 1992. xxvi + 360 + xxv + 437 pp. LCCN HD70.U5 P424 1992.
- [Pyl70] **Pylyshyn:1970:PCR**  
Zenon W. Pylyshyn, editor. *Perspectives on the computer revolution*. Prentice-Hall series in automatic computation. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 1970. ISBN 0-13-660761-6. xx + 540 pp. LCCN QA76 .P94.
- [Que88] **Queisser:1988:CM**  
Hans Queisser. *The conquest of the microchip*. Harvard University Press, Cambridge, MA, USA, 1988. ISBN 0-674-16296-X. x + 200 pp. LCCN TK7874.Q3613 1988. Translated by Diane Crawford-Burkhardt from the original German edition, Kristallene Krisen.
- [RA86] **Rees:1986:CQD**  
Mina Rees and G. D. Austrian. Comments, queries, and debate: a correction to a review; Hollerith at Computing-Tabulating-Recording. *Annals of the History of Computing*, 8(3):312–313, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3312.pdf>; <http://www.computer.org/annals/an1986/a3312abs.htm>.
- [Raj80] **Rajchman:1980:ERC**  
Jan Rajchman. Early research on computers at RCA. In Metropolis et al. [MHR80], pages 465–469. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

- [Ral76] **Ralston:1976:ECSb**  
 Anthony Ralston. *Encyclopedia of computer science*. Van Nostrand Reinhold Co., New York, NY, USA, 1976. ISBN 0-442-80321-4. xxviii + 1523 pp. LCCN QA76.15 .E48 1976b. Rev. ed. published as: *Encyclopedia of computer science and engineering*. 2nd ed. c1983.
- [Ram89] **Ramunni:1989:LCI**  
 Girolamo Ramunni. Louis Couffignal, 1902–1966: Informatics pioneer in France? *Annals of the History of Computing*, 11(4):247–256, October/December 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4247.pdf>; <http://www.computer.org/annals/an1989/a4247abs.htm>.
- [Ran79] **Randell:1979:ABO**  
 Brian Randell. An annotated bibliography on the origins of digital computers. *Annals of the History of Computing*, 1(2):101–207, October/December 1979. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a2101.pdf>; <http://www.computer.org/annals/an1979/a2101abs.htm>.
- [Ran80a] **Randell:1980:C**  
 B. Randell. The COLOSUS. In Metropolis et al. [MHR80], pages 47–92. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- [Ran80b] **Randell:1980:ODC**  
 B. Randell. The origins of digital computers: Supplementary bibliography. In Metropolis et al. [MHR80], pages 629–659. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- [Ran81] **Randell:1981:CEF**  
 B. Randell. Comment on “The ENIAC: The First General-Purpose Electronic Computer, by A. W. Burks and A. R. Burks”. *Annals of the History of Computing*, 3(4):396–397, October/December 1981. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a4389.pdf>. See [BB81, BB82, Phe82].
- [Ran82a] **Randall:1982:AEC**  
 Brian Randall. The advent of electronic computers. In Randell [Ran82], pages 293–301. ISBN 0-387-11319-3, 3-

- 540-11319-3. LCCN TK7885.A5 O741 1982.
- [Ran82b] Brian Randall. Aiken and IBM. In Randell [Ran82l], pages 191–194. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Ran82c] Brian Randall. Analytical engines. In Randell [Ran82l], pages 9–18. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Ran82d] Brian Randall. Bell Telephone Laboratories. In Randell [Ran82l], pages 241–245. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Ran82e] Brian Randall. Bibliography. In Randell [Ran82l], pages 531–544. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982. This is an extensively-annotated list of publications.
- [Ran82f] Brian Randall. Index to bibliography. In Randell [Ran82l], pages 545–562. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Ran82g] Brian Randall. Introduction. In Randell [Ran82l], pages 1–7. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Ran82h] Brian Randall. Subject index. In Randell [Ran82l], pages 563–580. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Ran82i] B. Randell. The case of the missing memoranda. *Annals of the History of Computing*, 4(1):67–68, January/March 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1066.pdf>; <http://www.computer.org/annals/an1982/a1066abs.htm>.
- [Ran82j] Brian Randell. Colossus: Godfather of the computer (1977). In *The Origins of Digital Computers: Selected Papers* [Ran82l], pages 349–354. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Ran82k] Brian Randell. From Analytical Engine to electronic digital computer: The contributions of Ludgate, Torres and Bush. *Annals of the History of Computing*, 4(4):327–341, October/December 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a4327.pdf>; <http://www.computer.org/annals/an1982/a4327abs.htm>.

**Randall:1982:AI****Randall:1982:SI****Randall:1982:AE****Randell:1982:CMM****Randall:1982:BTL****Randell:1982:CGC****Randall:1982:B****Randell:1982:AEE****Randall:1982:IB****Randall:1982:I**

- org/annals/an1982/a4327abs.htm.
- Randell:1982:ODC**
- [Ran82l] Brian Randell, editor. *The Origins of Digital Computers: Selected Papers*. Texts and monographs in computer science. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., third edition, 1982. ISBN 0-387-11319-3, 3-540-11319-3. xvi + 580 pp. LCCN TK7885.A5 O741 1982.
- Randell:1982:SPE**
- [Ran82m] Brian Randell. Stored program electronic computers. In *The Origins of Digital Computers: Selected Papers* [Ran82l], pages 375–381. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- Randell:1983:MA**
- [Ran83] Brian Randell. A mysterious advertisement. *Annals of the History of Computing*, 5(1):60–63, January/March 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a1060.pdf>; <http://www.computer.org/annals/an1983/a1060abs.htm>.
- Randell:1987:CWM**
- [Ran87] B. Randell. Comments on Wiener's memorandum. *Annals of the History of Computing*, 9(2):193–194, April/June 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a2183.pdf>; <http://www.computer.org/annals/an1987/a2183abs.htm>.
- Raymond:1989:ASE**
- [Ray89] François-Henri Raymond. An adventure with a sad ending: The SEA. *Annals of the History of Computing*, 11(4):263–277, October/December 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4263.pdf>; <http://www.computer.org/annals/an1989/a4263abs.htm>.
- Rosen:1985:CQD**
- [RB85] Saul Rosen and J. G. Brainerd. Comments, questions, and debate: Alfred Tarski in 1940; comments on Minutes of Patent Conference at Moore School. *Annals of the History of Computing*, 7(4):364–365, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4364.pdf>; <http://www.computer.org/annals/an1985/a4364abs.htm>.
- Rosin:1982:CQD**
- [RBZ82] Robert F. Rosin, C. J. Bashe, and Konrad Zuse. Comments, queries, and debate: Comments on Early Computers and IBM; A note on the SSEC; com-



- ments. *Annals of the History of Computing*, 4(2):185–187, April/June 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a2185.pdf>; <http://www.computer.org/annals/an1982/a2185abs.htm>. [Rei81]
- Rector:1986:PRF**
- [Rec86] Robert W. Rector. Personal recollections on the first quarter-century of AFIPS. *Annals of the History of Computing*, 8(3):261–269, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3261.pdf>; <http://www.computer.org/annals/an1986/a3261abs.htm>. [Rei88]
- Rees:1982:CPO**
- [Ree82] Mina Rees. The Computing Program of the Office of Naval Research, 1946–1953. *Annals of the History of Computing*, 4(2):102–120, April/June 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a2102.pdf>; <http://www.computer.org/annals/an1982/a2102abs.htm>. [Rei91]
- Rees:1985:FCM**
- [Ree85] Mina Rees. The Federal Computing Machine Program. *Annals of the History of Computing*, 7(2):156–163, April/June 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a2156.pdf>; <http://www.computer.org/annals/an1985/a2156abs.htm>. [Rei81]
- Reingold:1981:RMU**
- Nathan Reingold. Refugee mathematicians in the United States of America, 1933–1941: reception and reaction. *Annals of Science*, 38(3):313–338, 1981. CODEN ANNSA8. ISSN 0003-3790 (print), 1464-505X (electronic). [Reid:1988:CC]
- Reid:1988:CC**
- T. R. Reid. Computers and chips. In *Inventors and discoverers: changing our world* [Nat88], page ?? ISBN 0-87044-751-3, 0-87044-752-1, 0-87044-753-X. LCCN T18 .I57 1988. [Reingold:1991:RCA]
- Reingold:1991:RCA**
- Nathan Reingold. Review: Cortada: Archives of data-processing history, a guide to major U.S. collections. *Annals of the History of Computing*, 13(3):310–311, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3308.pdf>; <http://www.computer.org/annals/an1991/a3308abs.htm>. [Rejewski:1981:HPM]
- Rejewski:1981:HPM**
- Marian Rejewski. How Polish mathematicians deciphered the Enigma. *Annals of the History*

- of *Computing*, 3(3):213–234, July/September 1981. CODEN AHCOE5. ISSN 0164-1239. [RH90]  
 URL <http://dlib.computer.org/an/books/an1981/pdf/a3213.pdf>; <http://www.computer.org/annals/an1981/a3213abs.htm>. Afterwords by Cipher A. Deavours and I. J. Good. This article was entitled “Jak matematycy polscy rozszyfrowz Enigmę” in the *Annals of the Polish Mathematical Society*, Series II, *Wiadomości Matematyczne*, Volume 23, 1980, 1-28, translated by Joan Stepenske. See minor correction [Ano81e]. [RH00]
- [RGB83] Robert F. Rosin, Bernard A. Galler, and J. G. Brainerd. Comments, queries, and debate: Query on TSS; first paper on computer business applications. *Annals of the History of Computing*, 5(4):404–405, October/December 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4404.pdf>; <http://www.computer.org/annals/an1983/a4404abs.htm>. [RH02]
- [RH88] Glenn Rifkin and George Har-  
 rar. *The ultimate entrepreneur: the story of Ken Olsen and Digital Equipment Corporation*. Contemporary Books, Chicago, IL, USA, 1988. ISBN 0-8092-4559-0. xii + 332 pp. LCCN HD9696.C62 O4871 1988. [Rifkin:1988:UES]
- [Rifkin:1990:UES] Glenn Rifkin and George Har-  
 rar. *The ultimate entrepreneur: the story of Ken Olsen and Digital Equipment Corporation*. Prima Publishing, Rocklin, CA, USA, updated edition, 1990. ISBN 1-55958-022-4. xii + 336 pp. LCCN HD9696.C62 O487 1990. US\$10.95.
- [Rojas:2000:FCH] Raúl Rojas and Ulf Hasha-  
 gen, editors. *The first computers: history and architectures*. History of computing. MIT Press, Cambridge, MA, USA, 2000. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). xii + 457 pp. LCCN QA76.17 .F57 2000.
- [Rojas:2002:FCH] Raúl Rojas and Ulf Hasha-  
 gen, editors. *The first computers: history and architectures*. History of computing. MIT Press, Cambridge, MA, USA, 2002. ISBN 0-262-68137-4. xii + 457 pp.
- [Richenhagen:1985:CRR] Gottfried Richenhagen. *Carl Runge (1856–1927): von der reinen Mathematik zur Numerik*. Studien zur Wissenschafts-, Sozial- und Bildungsgeschichte der Mathematik ; Bd. 1. Vandenhoeck and Ruprecht, Göttingen, Germany, 1985. ISBN 3-525-40308-9. xiii + 355 pp. LCCN QA221 .R541 1985.

- [RL81] **Rogers:1981:CQD**  
James L. Rogers and J. A. N. Lee. Comments, queries, and debate: The Sumador Chino; history of FORTRAN. *Annals of the History of Computing*, 3(4):408–410, October/December 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a4408.pdf>.
- [RM76] **Ralston:1976:ECSa**  
Anthony Ralston and Chester L. Meek. *Encyclopedia of computer science*. Petrocelli/Charter, New York, NY, USA, 1976. ISBN 0-88405-321-0. xxviii + 1523 pp. LCCN QA76.15 .E48. US\$60.00.
- [RMV82] **Rajchman:1982:REP**  
J. A. Rajchman, G. A. Morton, and A. W. Vance. Report on electronic predictors for anti-aircraft fire control (1942). In Randell [Ran82], pages 345–347. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Rob80] **Robertson:1980:OI**  
James E. Robertson. The ORDVAC and the ILLIAC. In Metropolis et al. [MHR80], pages 347–364. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- [Rob87] **Roberts:1987:FPU**  
C. J. D. (Jim) Roberts. Comments, queries, and debate: Babbage’s Difference Engine No. 1 and the production of sine tables. *Annals of the History of Computing*, 9(2):210–212, July/September 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a2210.pdf>; <http://www.computer.org/annals/an1987/a2210abs.htm>.
- [Roc83a] **Rochester:1983:CPP**  
N. Rochester. Computer programs produced by the Planning Group. *Annals of the History of Computing*, 5(2):133, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2133a.pdf>; <http://www.computer.org/annals/an1983/a2133aabs.htm>.
- [Roc83b] **Rochester:1983:PSC**  
Nathaniel Rochester. The 701 Project as seen by its Chief Architect. *Annals of the History of Computing*, 5(2):115–117, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2115b.pdf>; <http://www.computer.org/annals/an1983/a2115babs.htm>.

- Rojas:2000:AKZ**
- [Roj00] Raúl Rojas. The architecture of Konrad Zuse's early computing machines. In Rojas and Hashagen [RH00], pages 237–261. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- Rosenheim:1983:IFP**
- [Ros83] D. E. Rosenheim. Installation of the first production 701. *Annals of the History of Computing*, 5(2):146–147, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2146b.pdf>; <http://www.computer.org/annals/an1983/a2146babs.htm>.
- Rosenberg:1984:OEE**
- [Ros84a] Robert Rosenberg. The origins of EE education: a matter of degree. *IEEE Spectrum*, 21(7):60–68, July 1984. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- Rosenblatt:1984:SFW**
- [Ros84b] Bruce Rosenblatt. The successors to FORTRAN—why does FORTRAN survive? *Annals of the History of Computing*, 6(1):39–40, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1028.pdf>; <http://www.computer.org/annals/an1984/a1028abs.htm>.
- Rosser:1984:HHL**
- [Ros84c] J. Barkley Rosser. Highlights of the history of the lambda-calculus. *Annals of the History of Computing*, 6(4):337–349, October/December 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4337.pdf>; <http://www.computer.org/annals/an1984/a4337abs.htm>.
- Rosin:1987:PBB**
- [Ros87] Robert F. Rosin. Prologue: The Burroughs B 5000. *Annals of the History of Computing*, 9(1):6–7, January/March 1987. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1006.pdf>; <http://www.computer.org/annals/an1987/a1006abs.htm>.
- Rose:1989:WEE**
- [Ros89] Frank Rose. *West of Eden: the end of innocence at Apple Computer*. Viking, New York, NY, USA, 1989. ISBN 0-670-81278-1. 356 pp. LCCN HD9696.C64 A867 1989.
- Rosen:1990:OMC**
- [Ros90] Saul Rosen. The origins of modern computing. *Computing Reviews*, ??(??):450–581, September 1990. CODEN CPGRA6. ISSN 0010-4884, 0149-1202.

- [RR83] **Reilly:1983:ECS**  
 Edwin D. Reilly and Anthony Ralston. *Encyclopedia of computer science and engineering*. Van Nostrand Reinhold Co., New York, NY, USA, second edition, 1983. ISBN 0-442-24496-7. xxix + 1664 pp. LCCN QA76.15 .E56 1983 11 Ref. Rev. ed. of: *Encyclopedia of computer science*. 1st ed. c1976.
- [RR92] **Ralston:1992:ECS**  
 Anthony Ralston and Edwin D. Reilly. *Encyclopedia of computer science*. Van Nostrand Reinhold Co., New York, NY, USA, third edition, 1992. ISBN 0-442-27679-6. xxv + 1558 pp. LCCN QA76.15 .E48 1993.
- [RRH00] **Reilly:2000:ECS**  
 Edwin D. Reilly, Anthony Ralston, and David Hemmendinger. *Encyclopedia of computer science*. Nature Pub. Group, London, UK, fourth edition, 2000. ISBN 0-333-77879-0, 1-56159-248-X (Grove's Dictionaries). xxix + 2034 + [16] pp. LCCN QA76.15 .E48 2000. Previous ed.: Anthony Ralston, Edwin D. Reilly, Caryl Ann Dahlin. London: Chapman and Hall, 1993.
- [RS80a] **Raines:1980:NNH**  
 Jane M. Raines and Raymond W. Smilor. News and notices: History of Computing at the Science Museum, London; CBI Awards Fellowship for 1979–1980; CBI Fellowship 1980–1981; Analysis of
- [RS80b] **Redmond:1980:PWH**  
 Kent C. Redmond and Thomas Malcolm Smith. *Project Whirlwind: the history of a pioneer computer*. Digital Press, 12 Crosby Drive, Bedford, MA 01730, USA, 1980. ISBN 0-932376-09-6. xiv + 280 pp. LCCN TK7889.W47 .R43. US\$22.00.
- [RS82] **Rogers:1982:MRC**  
 James L. Rogers and Nancy Stern. Meetings in retrospect: Clark on the LINC; Burks on the Stored-Program Concept. *Annals of the History of Computing*, 4(2):182–183, April/June 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a2182.pdf>; <http://www.computer.org/annals/an1982/a2182abs.htm>.
- [RUvN47] **Richtmyer:1947:SMN**  
 Robert D. Richtmyer, Stanislaw Ulam, and John von Neumann. Statistical methods in neutron diffusion. Technical Report LAMS-551, Los Alamos Scientific Laboratory, Los Alamos, NM, USA, April 9, 1947. 22 pp.
- a U.S.-U.S.S.R. Exchange Program. *Annals of the History of Computing*, 2(1):76–78, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1076.pdf>; <http://www.computer.org/annals/an1980/a1076abs.htm>.

Republished in typeset form in [Hur85].

**Richtmeyer:1985:SMN**

- [RvN85] R. D. Richtmyer and J. von Neumann. Statistical methods in neutron diffusion. *Annals of the History of Computing*, 7(2):148–155, April/June 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a2141.pdf>; <http://www.computer.org/annals/an1985/a2141abs.htm>. [SA88] Reprint of report with letters of March 11, 1947 and April 2, 1947.

**Rees:1985:RRR**

- [RWSW85] Mina Rees, Eric A. Weiss, K. W. Smillie, and M. R. Williams. Reviews: N. Reingold, Refugee Mathematicians in the United States of America 1933–1947; R. Rosenberg, The Origins of EE Education; A. Bullock and R. B. Woodings, The Fontana Biographical Companion to Modern Thought; D. de Solla Price, A History of Calculating Machines; capsule reviews. *Annals of the History of Computing*, 7(1):70–79, January/March 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1070.pdf>; <http://www.computer.org/annals/an1985/a1070abs.htm>. [Sak84]

**Ryckman:1983:ICG**

- [Ryc83] George F. Ryckman. 17. the

IBM 701 computer at the General Motors Research Laboratories. *Annals of the History of Computing*, 5(2):210–212, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2210.pdf>; <http://www.computer.org/annals/an1983/a2210abs.htm>.

**Smith:1988:FFH**

Douglas K. Smith and Robert C. Alexander. *Fumbling the future: how Xerox invented, then ignored, the first personal computer*. W. Morrow, New York, NY, USA, 1988. ISBN 0-688-06959-2. 274 pp. LCCN HD9802.3.U64 X4771 1988.

**Sakoda:1984:DSA**

James M. Sakoda. A dynamic storage allocation language — DYSTAL. *Annals of the History of Computing*, 6(1):37–38, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1028.pdf>; <http://www.computer.org/annals/an1984/a1028abs.htm>.

**Sale:2000:CBP**

- [Sal00] Anthony E. Sale. The Colossus of Bletchley Park: the German cipher system. In Rojas and Hashagen [RH00], pages 351–364. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.

- Sammet:1979:GAH**
- [Sam79] Jean E. Sammet. General AFIPS history of computing activities. *Annals of the History of Computing*, 1(1):6–8, July/September 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1006.pdf>; <http://www.computer.org/annals/an1979/a1006abs.htm>. [Sam87b]
- Sammet:1980:AAH**
- [Sam80] Jean E. Sammet. Activities of AFIPS history of computing committee. *Annals of the History of Computing*, 2(1):75–76, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1075.pdf>; <http://www.computer.org/annals/an1980/a1075abs.htm>. [Sam87c]
- Sammet:1985:BSE**
- [Sam85] Jean E. Sammet. Brief summary of the early history of COBOL. *Annals of the History of Computing*, 7(4):288–303, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4288.pdf>; <http://www.computer.org/annals/an1985/a4288abs.htm>. [Sam88a]
- Sammet:1987:SSQa**
- [Sam87a] Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 9(1):95, 107–109, January/March 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1095.pdf>; <http://www.computer.org/annals/an1987/a1095abs.htm>.
- Sammet:1987:SSQb**
- Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 9(2):202–203, 217–218, April/June 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a2202.pdf>; <http://www.computer.org/annals/an1987/a2202abs.htm>.
- Sammet:1987:SSQc**
- Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 9(3/4):356–357, 381–383, July/September 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3356.pdf>; <http://www.computer.org/annals/an1987/a3356abs.htm>.
- Sammet:1988:SSQa**
- Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 10(1):73, 97–99, January/March 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/>

- an/books/an1988/pdf/a1073.pdf; <http://www.computer.org/annals/an1988/a1073abs.htm>. [Sam89a]
- [Sam88b] Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 10(2):133, 153–155, April/June 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a2133a.pdf>; <http://www.computer.org/annals/an1988/a2133aabs.htm>. [Sam89b]
- [Sam88c] Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 10(3):209, 233–234, July/September 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a3209a.pdf>; <http://www.computer.org/annals/an1988/a3209aabs.htm>. [Sam89c]
- [Sam88d] Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 10(4):335–336, 375–380, October/December 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4335.pdf>; <http://www.computer.org/annals/an1988/a4335abs.htm>. [Sam89d]
- Sammet:1989:SSQa**
- Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 11(1):43, 61–64, January/March 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a1043a.pdf>; <http://www.computer.org/annals/an1989/a1043aabs.htm>.
- Sammet:1989:SSQb**
- Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 11(2):131, 155–157, April/June 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a2131a.pdf>; <http://www.computer.org/annals/an1989/a2131aabs.htm>.
- Sammet:1989:SSQc**
- Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 11(3):206–207, 232–233, July/September 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3206.pdf>; <http://www.computer.org/annals/an1989/a3206abs.htm>.
- Sammet:1989:SSQd**
- Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 11



- (4):321–322, 333–335, October/December 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4321.pdf>; <http://www.computer.org/annals/an1989/a4321abs.htm>. [Sam90d]
- Sammet:1990:SSQa**
- [Sam90a] Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 12(1):55, January/March 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a1055a.pdf>; <http://www.computer.org/annals/an1990/a1055aabs.htm>. [Sam91a]
- Sammet:1990:SSQb**
- [Sam90b] Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 12(2):128–130, April/June 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2128.pdf>; <http://www.computer.org/annals/an1990/a2128abs.htm>. [Sam91b]
- Sammet:1990:SSQc**
- [Sam90c] Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 12(3):204, July/September 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a3204.pdf>; <http://www.computer.org/annals/an1990/a3204abs.htm>. [Sam90d]
- Sammet:1990:SSQd**
- Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 12(4):267–268, October/December 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4267.pdf>; <http://www.computer.org/annals/an1990/a4267abs.htm>. [Sam90d]
- Sammet:1991:HBS**
- Jean E. Sammet. Harvard Business School MIS history project self-study questions. *Annals of the History of Computing*, 13(2):228, April/June 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2228.pdf>; <http://www.computer.org/annals/an1991/a2228abs.htm>. [Sam90d]
- Sammet:1991:SSQb**
- Jean E. Sammet. Self-study questions. *Annals of the History of Computing*, 13(4):358–359, October/December 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a4358.pdf>; <http://www.computer.org/annals/an1991/a4358abs.htm>. [Sam90d]

- [Sam91c] **Sammet:1991:SSQa**  
 Jean E. Sammet. Self-study questions & answers. *Annals of the History of Computing*, 13(2):228, April/June 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2228.pdf>; <http://www.computer.org/annals/an1991/a2228abs.htm>.
- [Sam91d] **Sammet:1991:SAI**  
 Jean E. Sammet. Some approaches to, and illustrations of, programming language history. *Annals of the History of Computing*, 13(1):33–50, January/March 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1033.pdf>; <http://www.computer.org/annals/an1991/a1033abs.htm>.
- [San80] **Santesmases:1980:OIT**  
 José García Santesmases. *Obra e inventos de Torres Quevedo*. Instituto de España, Madrid, Spain, 1980. ISBN 84-85559-07-X. xiv + 367 + 3 pp. LCCN ????. With a foreword by Alberto Dou Mas de Xexas, S.J.
- [San82] **Santesmases:1982:ECD**  
 Jose Garcia Santesmases. Early computer developments in Madrid. *Annals of the History of Computing*, 4(1):31–34, January/March 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1031.pdf>; <http://www.computer.org/annals/an1982/a1031abs.htm>.
- [SBET85] **Smillie:1985:RFM**  
 K. W. Smillie, F. L. Bauer, Ralph Erskine, and Henry S. Tropp. Reviews: O. I. Franksen, Mr. Babbage's Secret; F. H. Hinsley, British Intelligence in the Second World War; T. M. Thompson, From Error-Correcting Codes Through Sphere Packings to Simple Groups; capsule reviews. *Annals of the History of Computing*, 7(2):185–191, April/June 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a2185.pdf>; <http://www.computer.org/annals/an1985/a2185abs.htm>.
- [SC85] **Strong:1985:RIR**  
 Jack A. Strong and Richard F. Clippinger. Recollections on the Intermediate-Range Committee. *Annals of the History of Computing*, 7(4):326–328, October/December 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4326.pdf>; <http://www.computer.org/annals/an1985/a4326abs.htm>.
- [Sch81] **Schwarz:1981:EYC**  
 H. R. Schwarz. The early years of computing in Switzer-

- land. *Annals of the History of Computing*, 3(2):121–132, April/June 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a2121.pdf>; <http://www.computer.org/annals/an1981/a2121abs.htm>. [Sch88]
- [Sch82] Helmut Schreyer. Technical computing machines (1939). In Randell [Ran82], pages 171–173. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982. [Sch90]
- [Sch83] Walter C. Schlieser. 14. the 701 at Douglas, El Segundo. *Annals of the History of Computing*, 5(2):204–205, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2204.pdf>; <http://www.computer.org/annals/an1983/a2204abs.htm>. [Sco94]
- [Sch85] Ben Schneiderman. The relationship between COBOL and computer science. *Annals of the History of Computing*, 7(4):348–352, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4348.pdf>; <http://www.computer.org/annals/an1985/a4348abs.htm>. [SE86]
- [Schmitt:1988:USC] William F. Schmitt. The UNIVAC SHORT CODE. *Annals of the History of Computing*, 10(1):7–18, January/March 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1007.pdf>; <http://www.computer.org/annals/an1988/a1007abs.htm>.
- [Schreyer:1990:EME] Helmut T. Schreyer. An experimental model of an electronic computer. *Annals of the History of Computing*, 12(3):187, 189–197, July/September 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a3187.pdf>; <http://www.computer.org/annals/an1990/a3187abs.htm>.
- [Scott:1994:PCM] D. W. Scott. *Portable color multimedia training systems based on monochrome laptop computers (CBT-in-a-briefcase), with spinoff implications for video uplink and downlink in space-flight operations*. Washington, DC, USA, 1994. Shipping list no. 94-0809-M.
- [Smillie:1986:RWA] K. W. Smillie and Ralph Erskine. Reviews: W. Aspray, Should the Term Fifth Generation Computers Be Banned?; C.

- A. Deavours and L. Kruh, Machine Cryptography and Modern Cryptanalysis; capsule reviews. *Annals of the History of Computing*, 8(2):199–200, 202, 204–205, April/June 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a2199.pdf>; <http://www.computer.org/annals/an1986/a2199abs.htm>. [SG85]
- Lloyd Searle. The bombsight war: Norden vs. Sperry. *IEEE Spectrum*, 26(9):60–64, September 1989. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic). [Sea89]
- Robert W. Seidel. Reconstructions, historical and otherwise: the challenge of high-tech artifacts. In Rojas and Hashagen [RH00], pages 33–52. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000. [Sei00]
- Terrence J. Sejnowski. The computer and the brain revisited. *Annals of the History of Computing*, 11(3):197–201, July/September 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3197.pdf>; <http://www.computer.org/annals/an1989/a3197abs.htm>. [Sej89]
- Jean E. Sammet and Jerome Garfunkel. Summary of changes in COBOL, 1960–1985. *Annals of the History of Computing*, 7(4):342–347, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4342.pdf>; <http://www.computer.org/annals/an1985/a4342abs.htm>. [Sammet:1985:SCC]
- Nancy Stern and James J. Horning. HOPL: History of programming languages conference. *Annals of the History of Computing*, 1(1):68–71, July/September 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1068.pdf>; <http://www.computer.org/annals/an1979/a1068abs.htm>. [Stern:1979:HHP]
- Claude Shannon. A mathematical theory of cryptography. Classified report, Bell Laboratories, Murray Hill, NJ, USA, September 1, 1945. [Sha45]
- Claude Shannon. A mathematical theory of communication. *The Bell System Technical Journal*, 27(3):379–423, July 1948. CODEN BSTJAN. ISSN 0005-8580. From the first page: “If the base 2 is used the resulting

units may be called binary digits, or more briefly, *bits*, a word suggested by J. W. Tukey.”. This is the first known printed instance of the word ‘bit’ with the meaning of binary digit.

**Shannon:1948:MTCb**

[Sha48b]

Claude Shannon. A mathematical theory of communication (continued). *The Bell System Technical Journal*, 27(4): 623–656, October 1948. CODEN BSTJAN. ISSN 0005-8580.

**Shaw:1989:ARG**

[Sha89]

Mary Shaw. Anecdotes: Remembrances of a graduate student. *Annals of the History of Computing*, 11(2):141–143, April/June 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a2131b.pdf>; <http://www.computer.org/annals/an1989/a2131babs.htm>. Reprinted from Panel, “A Twenty Year Retrospective of the NATO Software Engineering Conferences”, in Proc. 11th Int. Conf. on Software Engineering, vol. 11, pp. 99-100, 1989.

**Strachey:1981:AIP**

[SHH81]

C. Strachey, Velma R. Huskey, and Harry D. Huskey. Anecdotes: An impossible program; Charles Babbage and Lady Lovelace. *Annals of the History of Computing*, 3(4):414–415, October/December 1981. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a4414.pdf>.

[Shu84]

[Shu96]

[Sim91]

[Sla87]

[Slo82]

[computer.org/an/books/an1981/pdf/a4414.pdf](http://dlib.computer.org/an/books/an1981/pdf/a4414.pdf).

**Shurkin:1984:EMH**

Joel N. Shurkin. *Engines of the mind: a history of the computer*. Norton, New York, NY, USA, 1984. ISBN 0-393-01804-0. 352 pp. LCCN QA76.17 .S49 1984.

**Shurkin:1996:EME**

Joel N. Shurkin. *Engines of the mind: the evolution of the computer from mainframes to microprocessors*. Norton, New York, NY, USA, updated edition, 1996. ISBN 0-393-31471-5 (paperback). 363 pp. LCCN QA76.17 .S49 1996. US\$13.00, CDN\$16.99.

**Simon:1991:MML**

Herbert A. Simon. *Models of My Life*. Alfred P. Sloan Foundation series. Basic Books, New York, NY, USA, 1991. ISBN 0-465-04640-1. xxix + 415 pp. LCCN HB119.S47 A3 1991.

**Slater:1987:PS**

Robert Slater. *Portraits in silicon*. MIT Press, Cambridge, MA, USA, 1987. ISBN 0-262-19262-4. xiv + 374 pp. LCCN TK7885.2 .S571 1987.

**Slotnick:1982:CDP**

D. L. Slotnick. The conception and development of parallel processors: a personal memoir. *Annals of the History of Computing*, 4(1):20–30, January/March 1982. CODEN AHCOE5. ISSN 0164-1239. URL

- <http://dlib.computer.org/an/books/an1982/pdf/a1020.pdf>; <http://www.computer.org/annals/an1982/a1020abs.htm>. [Smi84]
- [Slu80] **Slutz:1980:MBS**  
Ralph J. Slutz. Memories of the Bureau of Standard's SEAC. In Metropolis et al. [MHR80], pages 471–477. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976. [Smi88]
- [Sma46] **Small:1946:NAT**  
James Small. *Numerical analysis of tables to illustrate the geological history of species number in diatoms; an introductory summary*. Royal Irish Academy, Dublin. Proceedings. Hodges, Dublin, Ireland, 1946. 53–80 pp. LCCN AS122 .D85p sec.B v.50 no.4. Quantitative evolution - VIII. [Smi91]
- [Smi83] **Smith:1983:IMC**  
R. Blair Smith. The IBM 701 — marketing and customer relations. *Annals of the History of Computing*, 5(2):170–172, April/June 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2170.pdf>; <http://www.computer.org/annals/an1983/a2170abs.htm>. [Smi10]
- Smillie:1984:RFP**  
K. W. Smillie. Reviews: FORTRAN Papers from NCC '82 Proceedings; capsule reviews. *Annals of the History of Computing*, 6(1):74–80, January/March 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1074.pdf>; <http://www.computer.org/annals/an1984/a1074abs.htm>.
- Smith:1988:HOC**  
Richard E. Smith. A historical overview of computer architecture. *Annals of the History of Computing*, 10(4):277–303, October/December 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4277.pdf>; <http://www.computer.org/annals/an1988/a4277abs.htm>.
- Smillie:1991:RBD**  
K. W. Smillie. Review: Blum and Duncan: a history of medical informatics. *Annals of the History of Computing*, 13(3):311, July/September 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3308.pdf>; <http://www.computer.org/annals/an1991/a3308abs.htm>.
- Smiley:2010:MWI**  
Jane Smiley. *The man who in-*

- vented the computer: the biography of John Atanasoff, digital pioneer. Doubleday, New York, NY, USA, 2010. ISBN 0-385-52713-6, 0-385-53372-1 (e-book), 1-299-11995-6 (e-book). 246 + 8 pp. LCCN QA76.2.A75 S64 2010. US\$25.95. [Sob86]
- Simon:1986:IPL**
- [SN86] Herbert A. Simon and Allen Newell. Information Processing Language V on the IBM 650. *Annals of the History of Computing*, 8(1):47–49, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1047.pdf>; <http://www.computer.org/annals/an1986/a1047abs.htm>. [Spe80]
- Snedden:2011:WIC**
- [Sne11] Robert Snedden. *Who invented the computer?* Breakthroughs in science and technology. Arcturus Pub., Mankato, MN, USA, 2011. ISBN 1-84837-678-2. ??? pp. LCCN QA76.23 .S58 2011. [Spe00]
- Snyder:1980:CAP**
- [Sny80] Samuel S. Snyder. Computer advances pioneered by cryptologic organizations. *Annals of the History of Computing*, 2(1):60–70, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1060.pdf>; <http://www.computer.org/annals/an1980/a1060abs.htm>. [Sob86]
- Sobel:1986:IVJ**
- Robert Sobel. *IBM vs. Japan: the struggle for the future*. Stein and Day, New York, NY, USA, 1986. ISBN 0-8128-3071-7. 262 pp. LCCN HD9696.C64 I48851 1986. US\$18.95. [Speiser:1980:RCZ]
- A. P. Speiser. The relay calculator Z4. *Annals of the History of Computing*, 2(3):242–245, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3242.pdf>; <http://www.computer.org/annals/an1980/a3242abs.htm>. [Speiser:2000:KZZ]
- Ambros P. Speiser. Konrad Zuse’s Z4: architecture, programming, and modifications at the ETH Zurich. In Rojas and Hashagen [RH00], pages 263–276. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000. [Sprague:1980:CQD]
- Dick Sprague. Comments, queries, and debate: Response to comments on BINAC. *Annals of the History of Computing*, 2(3):268–271, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3268.pdf>.

- pdf; <http://www.computer.org/annals/an1980/a3268abs.htm>.
- Smillie:1982:RMA**
- [SR82] K. W. Smillie and Saul Rosen. Reviews: N. Metropolis, et al.: A History of Computing in the Twentieth Century; R. L. Wexelblat: History of Programming Languages; T. Forester: The Microelectronics Revolution; capsule reviews. *Annals of the History of Computing*, 4(1):69–78, January/March 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1069.pdf>; <http://www.computer.org/annals/an1982/a1069abs.htm>. [Sta85]
- Suekane:1980:RHT**
- [SS80] Ryota Suekane and K. W. Smillie. Reviews: H. Takahasi: The Birth of Electronic Computers in Japan; M. Beika: History of Office Mechanization in Japan; A. D. Falkoff and K. E. Iverson: The Evolution of APL; capsule reviews. *Annals of the History of Computing*, 2(4):378–384, October/December 1980. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4378.pdf>; <http://www.computer.org/annals/an1980/a4378abs.htm>. [Sta89]
- Smotherman:2010:ISP**
- [SS10] 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).
- Sheldon:1982:ICP**
- [ST82] John W. Sheldon and Liston Tatum. The IBM card-programmed electronic calculator (1951). In Randell [Ran82], pages 233–239. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- Staudenmaier:1985:TSR**
- John M. Staudenmaier. *Technology’s storytellers: reweaving the human fabric*. Society for the History of Technology and the MIT Press, Cambridge, MA, USA, 1985. ISBN 0-262-19237-3. xxvii + 282 pp. LCCN T20 .S73 1985.
- Staudenmaier:1989:TSR**
- [Sta89] John M. Staudenmaier. *Technology’s storytellers: reweaving the human fabric*. Society for the History of Technology and the MIT Press, Cambridge, MA, USA, 1989. ISBN 0-262-69135-3 (paperback), 0-262-19237-3. xxix + 282 pp. LCCN T20 .S73 1989.
- Starynkevitch:1990:SCC**
- [Sta90] Dimitri Starynkevitch. The SEA CAB 500 computer. *Annals of the History of Computing*, 12(1):23–29, January/



- March 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a1023.pdf>; <http://www.computer.org/annals/an1990/a1023abs.htm>. [Ste80c]
- [Ste79] Nancy Stern. The BINAC: a case study in the history of technology. *Annals of the History of Computing*, 1(1):9–20, July/September 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1009.pdf>; <http://www.computer.org/annals/an1979/a1009abs.htm>. [Ste80d]
- [Ste80a] Nancy Stern. John von Neumann's influence on electronic digital computing, 1944–1946. *Annals of the History of Computing*, 2(4):349–362, October/December 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4349.pdf>; <http://www.computer.org/annals/an1980/a4349abs.htm>. [Ste81]
- [Ste80b] Nancy Stern. John William Mauchly, 1907–1980. *Annals of the History of Computing*, 2(2):100–103, April/June 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a2100.pdf>; <http://www.computer.org/annals/an1980/a2100abs.htm>. [Ste84]
- Nancy Stern. Preserving computer-related source material. *Annals of the History of Computing*, 2(1):4–6, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1004.pdf>; <http://www.computer.org/annals/an1980/a1004abs.htm>.
- Nancy Fortgang Stern. *From ENIAC to UNIVAC: a case study in the history of technology*. Thesis (Ph.D.), State University of New York at Stony Brook, Stony Brook, NY, USA, 1980. xii + 388 pp.
- Nancy B. Stern. *From ENIAC to UNIVAC: an appraisal of the Eckert-Mauchly computers*. Digital Press history of computing series. Digital Press, Bedford, MA, USA, 1981. ix + 286 pp. LCCN QA76.5 .S775.
- Robert M. Steward. Anecdotes: The end of the ABC. *Annals of the History of Computing*, 6(3):317, July/September 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a3317.pdf>.

- pdf; <http://www.computer.org/annals/an1984/a3317abs.htm>.
- Stein:1985:ALL**
- [Ste85a] Dorothy Stein. *Ada, a life and a legacy*. MIT Press series in the history of computing. MIT Press, Cambridge, MA, USA, 1985. ISBN 0-262-19242-X. xix + 321 + [16] pp. LCCN QA29.L72 S741 1985. US\$19.95.
- Stern:1985:MPC**
- [Ste85b] Nancy Stern. Minutes of 1947 Patent Conference, Moore School of Electrical Engineering, University of Pennsylvania. *Annals of the History of Computing*, 7(2):100–116, April/June 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/annals/an1985/a2100abs.htm>.
- Stibitz:1980:EC**
- [Sti80] George R. Stibitz. Early computers. In Metropolis et al. [MHR80], pages 479–483. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- Stibitz:1982:ACM**
- [Sti82a] George R. Stibitz. Automatic computing machinery. *Annals of the History of Computing*, 4(2):140–142, April/June 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/annals/an1982/pdf/a2140.pdf>; <http://www.computer.org/annals/an1982/a2140abs.htm>.
- Stibnitz:1982:C**
- [Sti82b] G. R. Stibnitz. Computer (1940). In Randell [Ran82], pages 247–252. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- Stokes:1982:YRT**
- [Sto82] John W. (John Whitley) Stokes. *70 years of radio tubes and valves: a guide for electronic engineers, historians, and collectors*. Vestal Press, Vestal, NY, USA, 1982. ISBN 0-911572-27-9. viii + 247 pp. LCCN TK6565.V3 S68 1982. US\$21.95 (est.).
- Strachey:1965:LEI**
- [Str65] C. Strachey. Letter to the Editor: An impossible program. *The Computer Journal*, 7(4):313, January 1965. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic).
- Strong:1983:NAA**
- [Str83] Jack A. Strong. 10. the 701 at North American Aviation. *Annals of the History of Computing*, 5(2):201, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL

<http://dlib.computer.org/an/books/an1983/pdf/a2201b.pdf>; <http://www.computer.org/annals/an1983/a2201babs.htm>. [Svo80]

**Strong:1985:TND**

[Str85] Jack A. Strong. The tale of the near demise of COBOL at birth. *Annals of the History of Computing*, 7(4):326–327, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4326.pdf>; <http://www.computer.org/annals/an1985/a4326abs.htm>.

**Suekane:1980:EHC**

[Sue80] Ryota Suekane. Early history of computing in Japan. In Metropolis et al. [MHR80], pages 575–578. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Sumner:2000:AC**

[Sum00] Frank H. Sumner. The Atlas computer. In Rojas and Hashagen [RH00], pages 387–396. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.

**Svoboda:1980:MLA**

Antonin Svoboda. From mechanical linkages to electronic computers: Recollections from Czechoslovakia. In Metropolis et al. [MHR80], pages 579–585. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Stern:1980:CQD**

[SW80] Nancy Stern and Maurice V. Wilkes. Comments, queries, and debate: Who “invented” the first electronic digital computer?; Mauchly’s position on von Neumann’s role in drafting the EDVAC Report. *Annals of the History of Computing*, 2(4):375–377, October/December 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4375.pdf>; <http://www.computer.org/annals/an1980/a4375abs.htm>.

**Swade:1991:CCB**

[Swa91] Doron Swade. The construction of Charles Babbage’s difference engine. *Annals of the History of Computing*, 13(1):82–83, January/March 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1081>.

pdf; <http://www.computer.org/annals/an1991/a1081abs.htm>.

**Swade:2001:DEC**

- [Swa01] Doron Swade. *The Difference Engine: Charles Babbage and the Quest to Build the First Computer*. Viking, New York, NY, USA, 2001. ISBN 0-670-91020-1, 0-14-200144-9 (paperback). x + 342 + 16 pp. LCCN QA75 .S954 2001. URL <http://www.gbv.de/dms/bowker/toc/9780670910205.pdf>; <http://www.loc.gov/catdir/toc/fy034/00068643.html>; <http://www.zentralblatt-math.org/zmath/en/search/?an=1017.01006>. [SZ84]

**Sweeney:1983:ACS**

- [Swe83] Dura A. Sweeney. Los Alamos coding system and assembly program for the IBM 701. *Annals of the History of Computing*, 5(2):178–180, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2178.pdf>; <http://www.computer.org/annals/an1983/a2178abs.htm>. [TA81]

**Salzer:1981:RHH**

- [SWT<sup>+</sup>81] Herbert E. Salzer, Eric A. Weiss, Henry S. Tropp, Jane Smith, and Robert W. Recator. Reviews: H. H. Goldstine: *A History of Numerical Analysis*; Electronics: *An Age of Innovation*; J. A. N. Lee: *Banquet Anecdotes and Con-*

*ference Excerpts*; R. L. Wexelblat: *History of Programming Languages: Capsule reviews*. *Annals of the History of Computing*, 3(3):289–302, July/September 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a3289.pdf>; <http://www.computer.org/annals/an1981/a3289abs.htm>. See minor correction [Ano81e].

**Stewart:1984:MRJ**

Robert M. Stewart and Heinz Zemanek. Meetings in retrospect: John Vincent Atanasoff Celebration; Al-Khorezmi Anniversary in Turkestan. *Annals of the History of Computing*, 6(3):313–315, July/September 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a3313.pdf>; <http://www.computer.org/annals/an1984/a3313abs.htm>.

**Tropp:1981:MRN**

Henry S. Tropp and William Aspray. Meetings in retrospect: NCC History Session; Wilkinson Lecture on Pilot ACE. *Annals of the History of Computing*, 3(3):280–282, July/September 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a3280.pdf>; <http://www.computer.org/annals/an1981/a3280abs.htm>.

**Takahasi:1972:BEC**

- [Tak72] Hidetosi Takahasi. *The Birth of Electronic Computers in Japan*, volume 273 of *Chuokoron Shinshyo Series*. Chuokoronsha Publisher, Tokyo, Japan, 1972. 229 pp.

**Takahasi:1980:SIC**

- [Tak80] Hidetosi Takahasi. Some important computers of Japanese design. *Annals of the History of Computing*, 2(4):330–337, October/December 1980. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4330.pdf>; <http://www.computer.org/annals/an1980/a4330abs.htm>. Foreword by Richard I. Tanaka.

**Takahashi:1986:ETC**

- [Tak86] Sigeru Takahashi. Early transistor computers in Japan. *Annals of the History of Computing*, 8(2):144–154, April/June 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a2144.pdf>; <http://www.computer.org/annals/an1986/a2144abs.htm>.

**Tropp:1984:AOT**

- [TB84] Henry S. Tropp and John Grist Brainerd. Anecdotes: Origin of the term *Bit*; The Soviets and the ENIAC. *Annals of the History of Computing*, 6(2):152–156, April/

June 1984. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2152.pdf>; <http://www.computer.org/annals/an1984/a2152abs.htm>. See [Buc81].

**Tropp:1983:PSD**

- [TBB+83] Henry S. Tropp, Herbert D. Benington, Robert Bright, Robert P. Crago, Robert R. Everett, Jay W. Forrester, John V. Harrington, John F. Jacobs, Albert R. Shiely, Norman H. Taylor, and C. Robert Wieser. A perspective on SAGE: Discussion. *Annals of the History of Computing*, 5(4):375–398, October/December 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4375.pdf>; <http://www.computer.org/annals/an1983/a4375abs.htm>.

**Tomayko:1990:AEC**

- [TBB90] James E. Tomayko, Bruce H. Bruemmer, and Herbert S. Bright. Anecdotes: Early computer user groups; computer user groups [1960]. *Annals of the History of Computing*, 12(1):55–61, January/March 1990. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a1055b.pdf>; <http://www.computer.org/annals/an1990/a1055babs.htm>. See corrections [BDA91].

- [TBGE89] **Tomayko:1989:AWC**  
 James E. Tomayko, Ralf Bülow, Herbert R. J. Grosch, and John D. Elson. Anecdotes: The Windmill Computer—an eyewitness report of the Scheutz Difference Engine; in Von Braun country; origins of terms [Winchester disk and UNIX]. *Annals of the History of Computing*, 11(1):43–48, January/March 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a1043b.pdf>; <http://www.computer.org/annals/an1989/a1043babs.htm>.
- [TBLJ90] **Tomayko:1990:AMG**  
 James E. Tomayko, Bob Bemmer, Ernie Lassen, and Robert Johnson. Anecdotes: More on General Electric’s start in the computer business; Dr. Robert Johnson interview; comments on interview. *Annals of the History of Computing*, 12(2):130–137, April/June 1990. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2130.pdf>; <http://www.computer.org/annals/an1990/a2130abs.htm>.
- [TBS88] **Tomayko:1988:AIG**  
 James E. Tomayko, Bruce H. Bruemmer, and George Snively. Anecdotes: Introduction; General Electric enters the computer business. *Annals of the History of Computing*, 10(1):74–78, January/March 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1074.pdf>; <http://www.computer.org/annals/an1988/a1074abs.htm>.
- [TC79] **Tomash:1979:BEE**  
 Erwin Tomash and Arnold A. Cohen. The birth of an ERA: Engineering Associates, Inc. 1946–1955. *Annals of the History of Computing*, 1(2):83–97, October/December 1979. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a2083.pdf>; <http://www.computer.org/annals/an1979/a2083abs.htm>.
- [TD88] **Tomayko:1988:AFP**  
 James E. Tomayko and A. F. Draper. Anecdotes: Fast predictors: Computers and the U.S. Presidential Elections: UNIVAC on Election Night; IBM computers and the election of 1960. *Annals of the History of Computing*, 10(3):209–215, July/September 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a3209b.pdf>; <http://www.computer.org/annals/an1988/a3209babs.htm>.
- [TD90] **Tomayko:1990:ARP**  
 James E. Tomayko and A. S. (Sandy)

- Douglas. Anecdotes: For the record: Pioneering days in British computing. *Annals of the History of Computing*, 12(3):205–209, July/September 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a3205.pdf>; <http://www.computer.org/annals/an1990/a3205abs.htm>. [TG91]
- Tropp:1984:RPC**
- [TDCKW84] Henry S. Tropp, Philip H. Dorn, Martin Campbell-Kelly, and Eric A. Weiss. Reviews: P. E. Ceruzzi, Reckoners: The Prehistory of the Digital Computer from Relays to the Stored Program Concept, 1935–1945; E. A. Feigenbaum and P. McCorduck, The Fifth Generation; A. Hodges, Alan Turing: The Enigma; S. S. Husson, 25th Anniversary Issue, IBM Journal of Research and Development; M. Ledger, The Case of the ENIAC and The ENIAC’s Muddled History; capsule reviews. *Annals of the History of Computing*, 6(2):167–187, April/June 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2167.pdf>; <http://www.computer.org/annals/an1984/a2167abs.htm>. [Tho79]
- Tee:1983:HCB**
- [Tee83] Garry J. Tee. The heritage of Charles Babbage in Australasia. *Annals of the History of Computing*, 5(1):45–59, January/March 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a1045.pdf>; <http://www.computer.org/annals/an1983/a1045abs.htm>. [Tomayko:1991:ATS]
- Tomayko:1991:ATS**
- James E. Tomayko and Shane Greenstein. Anecdotes: The Tape Story Tapestry: Historical Research with Inaccessible Digital Information Technologies. *Annals of the History of Computing*, 13(3):277–285, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3277.pdf>; <http://www.computer.org/annals/an1991/a3277abs.htm>. [Thompson:1979:ECC]
- Thompson:1979:ECC**
- Thomas Miller Thompson. *From error-correcting codes through sphere packings to simple groups*. Thesis (Ph.D.), Department of Mathematics, University of California, Davis, Davis, CA, USA, 1979. 250 pp. [Thompson:1980:AHC]
- Thompson:1980:AHC**
- David W. Thompson. Anecdotes: How not to conserve memory (or what elegance is not). *Annals of the History of Computing*, 2(3):272–273, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3272.pdf>.

- pdf; <http://www.computer.org/annals/an1980/a3272abs.htm>.
- [Tho80b] James E. Thornton. The CDC 6600 project. *Annals of the History of Computing*, 2(4):338–348, October/December 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a4338.pdf>; <http://www.computer.org/annals/an1980/a4338abs.htm>.
- [Thornton:1980:CP] [Til83]
- [Tho83] Thomas M. Thompson. *From error-correcting codes through sphere packings to simple groups*, volume 21 of *Carus mathematical monographs*. Mathematical Association of America, Washington, DC, USA, 1983. ISBN 0-88385-023-0. xiv + 228 pp. LCCN QA268 .T56 1983. [Tim89]
- [Tomayko:1988:AAT] [TKE90]
- [THWV88] James E. Tomayko, Peter Hilton, Richard Louis Weis, and Alfred Van Sinderen. Anecdotes: Alan Turing in the Home Guard; Overcoming Murphy's Law; Babbage and the Scheutz Machine at Dudley Observatory. *Annals of the History of Computing*, 10(2):133–139, April/June 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a2133b.pdf>; <http://www.computer.org/annals/an1988/a2133babs.htm>.
- [Tillett:1983:UNC]
- Harley E. Tillett. 8. the 701 at the U.S. Navy China Lake installation, Inyokern, California. *Annals of the History of Computing*, 5(2):198–200, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2198.pdf>; <http://www.computer.org/annals/an1983/a2198abs.htm>.
- [Time-Life:1989:UCV]
- Time-Life Books. *Understanding Computers Vol. 24: Illustrated Chronology and Index*. Time-Life Books, Alexandria, VA, USA, 1989. ISBN ???? 128 pp. LCCN ????
- [Tomayko:1990:AES]
- James E. Tomayko, David J. Koepke, and James C. Emery. Anecdotes: The evolution of software design ideas; structured programming. *Annals of the History of Computing*, 12(4):269–276, October/December 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4269.pdf>; <http://www.computer.org/annals/an1990/a4269abs.htm>.
- [Tomayko:1989:ACI]
- James E. Tomayko, Lawrence W. Langley, and Juris Reinfelds.



- Anecdotes: a critical incident; the first port of UNIX. *Annals of the History of Computing*, 11(3):207–210, July/September 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3207.pdf>; <http://www.computer.org/annals/an1989/a3207abs.htm>. [Tod80]
- Tomayko:1991:AFC**
- [TLR<sup>+</sup>91] James E. Tomayko, J. A. N. Lee, Martin Rem, David Gries, Andrzej Blikle, and Robert L. Glass. Anecdotes: Frontiers of Computing: A Tribute to Edsger W. Dijkstra on the occasion of his 60th birthday University of Texas (Austin) 10–11 May 1990. *Annals of the History of Computing*, 13(1):91–100, January/March 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1091.pdf>; <http://www.computer.org/annals/an1991/a1091abs.htm>. [Tom80]
- Tomayko:1989:ACA**
- [TMRL89] James E. Tomayko, Nicholas C. Metropolis, R. D. Richtmyer, and John A. N. Lee. Anecdotes: The case against automatic programming. *Annals of the History of Computing*, 11(4):322–326, October/December 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4322.pdf>; <http://www.computer.org/annals/an1989/a4322abs.htm>. [Tom85a]
- Tomash:1980:SEE**
- Erwin Tomash. The start of an ERA: Engineering Research Associates, Inc., 1946–1955. In Metropolis et al. [MHR80], pages 485–495. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- Tomayko:1985:HHF**
- James E. Tomayko. Helmut Hoelzer’s fully electronic analog computer. *Annals of the History of Computing*, 7(3):227–240, July/September 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a3227.pdf>; <http://www.computer.org/annals/an1985/a3227abs.htm>. [Tom85a]
- Todd:1980:JHC**
- John Todd. John Hamilton Curtiss, 1909–1977. *Annals of the History of Computing*, 2(2):104–110, April/June 1980. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a2104.pdf>; <http://www.computer.org/annals/an1980/a2104abs.htm>.

- [Tom85b] **Tomayko:1985:NMS**  
James E. Tomayko. NASA's manned spacecraft computers. *Annals of the History of Computing*, 7(1):7–18, January/March 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1007.pdf>; <http://www.computer.org/annals/an1985/a1007abs.htm>.
- [Tom87] **Tomayko:1987:ECS**  
James E. Tomayko. *Encyclopedia of computer science and technology. Supplement 3, Computers in spaceflight: the NASA experience*. ????, ????, 1987. ISBN 0-8247-2268-X. xii + 404 pp.
- [Tom88] **Tomash:1988:MP**  
Erwin Tomash. The Madrid promptuary. *Annals of the History of Computing*, 10(1):52–67, 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1035.pdf>; <http://www.computer.org/annals/an1988/a1035abs.htm>.
- [Ton80] **Tonik:1980:EHL**  
Albert B. Tonik. Eulogy: Herman Lukoff, 1923–1979. *Annals of the History of Computing*, 2(3):196–197, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3196.pdf>; <http://www.computer.org/annals/an1980/a3196abs.htm>. Further Comment by Louis D. Wilson.
- [Tor82a] **TorresyQuevedo:1982:ECM**  
Leonardo Torres y Quevedo. Electromechanical calculating machine (1920). In Randell [Ran82], pages 109–120. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [Tor82b] **TorresyQuevedo:1982:EAD**  
Leonardo Torres y Quevedo. Essays on automatics — its definitions — theoretical extent of its applications (1914). In Randell [Ran82], pages 89–107. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [TPG<sup>+</sup>89] **Tomayko:1989:ATY**  
James E. Tomayko, Alan Perlis, Bernard A. Galler, David Gries, Doug Ross, and Mary Shaw. Anecdotes: Twenty year retrospective: The NATO Software Engineering Conferences; thoughts on software engineering; my thoughts on software engineering in the late 1960s; the NATO conferences from the perspective of an active software engineer; remembrances of a graduate student. *Annals of the History of Computing*, 11(2):131–143, April/June 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a2131b.pdf>; <http://www.computer.org/annals/an1989/a2131babs.htm>.

org/annals/an1989/a2131babs.htm.

**Tomayko:1992:AUT**

- [TPWW92] James E. Tomayko, Harry Polachek, Eric A. Weiss, and Richard L. Wexelblat. Anecdotes: UNIVAC trounces its own creator; HAL 9000 (1992?-2001); favorite hack. *Annals of the History of Computing*, 14(3):52-54, July/September 1992. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1992/pdf/a3052.pdf>; <http://www.computer.org/annals/an1992/a3052abs.htm>.

**Travis:1966:LAC**

- [Tra66] Larry Evan Travis. *A logical analysis of the concept of stored program: a step toward a possible theory of rational learning*. Thesis (Ph.D.), University of California, Los Angeles, Los Angeles, CA, USA, 1966. 377 pp.

**Trakhtenbrot:1984:SRA**

- [Tra84] B. A. Trakhtenbrot. A survey of Russian approaches to perebor (brute-force search) algorithms. *Annals of the History of Computing*, 6(4):384-400, October/December 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a4384.pdf>; <http://www.computer.org/annals/an1984/a4384abs.htm>. Partial English translation of L. Levin, *Universal*

*Search Problems* (in Russian), Problemy Peredachi Informat-sii (= Problems of Information Transmission), 9(3), pp. 265-266, (1973).

**Trimble:1986:IMD**

- [Tri86] George R. Trimble. The IBM 650 magnetic drum calculator. *Annals of the History of Computing*, 8(1):20-29, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1020.pdf>; <http://www.computer.org/annals/an1986/a1020abs.htm>.

**Tropp:1980:SCH**

- [Tro80] Henry S. Tropp. The Smithsonian Computer History Project and some personal recollections. In Metropolis et al. [MHR80], pages 115-124. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10-15 June 1976.

**Tropp:1982:RJWb**

- [Tro82a] Henry S. Tropp. Reviews: J. W. de Bakker and J. C. van Wet: Algorithmic Languages; capsule reviews. *Annals of the History of Computing*, 4(4):374-384, October/December 1982. CODEN AH-COE5. ISSN 0164-1239. URL

- <http://dlib.computer.org/an/books/an1982/pdf/a4374.pdf>; <http://www.computer.org/annals/an1982/a4374abs.htm>. [Tro84]
- Tropp:1982:RJWa**
- [Tro82b] Henry S. Tropp. Reviews: J. W. de Bakker, et al.: MC-25 Informatics Symposium; capsule reviews. *Annals of the History of Computing*, 4(3):289-291, July/September 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3289.pdf>; <http://www.computer.org/annals/an1982/a3289abs.htm>. [Tro85]
- Tropp:1983:AJC**
- [Tro83a] Henry S. Tropp. Anecdotes: L. J. Comrie. *Annals of the History of Computing*, 5(4):406, October/December 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4406.pdf>; <http://www.computer.org/annals/an1983/a4406abs.htm>. [Tro87]
- Tropp:1983:SNB**
- [Tro83b] Henry S. Tropp. SAGE at North Bay. *Annals of the History of Computing*, 5(4):401-403, October/December 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4401.pdf>; <http://www.computer.org/annals/an1983/a4401abs.htm>. [Tro84]
- Tropp:1984:FA**
- Henry S. Tropp. FORTRAN anecdotes. *Annals of the History of Computing*, 6(1):59-64, January/March 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a1059.pdf>; <http://www.computer.org/annals/an1984/a1059abs.htm>. [Tro85]
- Tropp:1985:MRH**
- Henry S. Tropp. Meetings in retrospect: Heinz Zemanek Honored in Vienna. *Annals of the History of Computing*, 7(4):356-360, October/December 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a4356.pdf>; <http://www.computer.org/annals/an1985/a4356abs.htm>. [Tro87]
- Tropp:1987:AMA**
- Henry S. Tropp. The 20th Anniversary Meeting of the Association for Computing Machinery: 30 August 1967. *Annals of the History of Computing*, 9(3/4):249-270, July/September 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3249.pdf>; <http://www.computer.org/annals/an1987/a3249abs.htm>. [Tro87]

**Todd:1985:CPS**

- [TS85] John Todd and Jean E. Sammet. Comment on previous self-study answer and response. *Annals of the History of Computing*, 7(1):65, 68–69, January/March 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1065.pdf>; <http://www.computer.org/annals/an1985/a1065abs.htm>.

**Tropp:1987:RMG**

- [TSD<sup>+</sup>87] Henry S. Tropp, K. W. Smilie, Philip H. Dorn, James W. Cortada, and Eric A. Weiss. Reviews: MacHale: George Boole. His Life and Work; Sobel: IBM vs. Japan: The Struggle for the Future; Williams: A History of Computing Technology; Winston: Misunderstanding Media; capsule reviews. *Annals of the History of Computing*, 9(1):100–107, January/March 1987. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a1100.pdf>; <http://www.computer.org/annals/an1987/a1100abs.htm>. [Tuk58]

**Tomayko:1988:AOT**

- [TTB<sup>+</sup>88] James E. Tomayko, Henry S. Tropp, W. Buchholz, Grace Murray Hopper, C. Strachey, Eric A. Weiss, Robert M. Stewart, and Bernard A. Galler. Anecdotes: Origin of the term bit; origin of the word byte; the first bug;

whence the “bug”; an impossible program; reminiscences of Los Alamos; Los Alamos from below; Jonathan Swift’s computing invention; debugging. *Annals of the History of Computing*, 10(4):336–348, October/December 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4336.pdf>; <http://www.computer.org/annals/an1988/a4336abs.htm>.

**Tee:1982:AAC**

- [TTG82] Garry J. Tee, Henry S. Tropp, and Bernard A. Galler. Anecdotes: Alexander Craig Aitken; Leslie John Comrie; MAD Compiler. *Annals of the History of Computing*, 4(4):371–372, October/December 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a4371.pdf>; <http://www.computer.org/annals/an1982/a4371abs.htm>.

**Tukey:1958:TCM**

John W. Tukey. The teaching of concrete mathematics. *American Mathematical Monthly*, 65(1):1–9, January 1958. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). This article is believed to contain the first published instance of the word ‘software’ in the meaning of instructions to a computer: “Today the ‘software’ comprising the care-

fully planned interpretive routines, compilers, and other aspects of automative programming are at least as important to the modern electronic calculator as its ‘hardware’ of tubes, transistors, wires, tapes and the like.” [p. 2].

**Tropp:1987:ABE**

[TW87]

Henry S. Tropp and Maurice V. Wilkes. Anecdotes: Babbage’s Expectations for the Difference Engine. *Annals of the History of Computing*, 9(2):203–204, April/June 1987. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a2203.pdf>; <http://www.computer.org/annals/an1987/a2203abs.htm>.

**Tropp:1987:AIM**

[TWA<sup>+</sup>87]

Henry S. Tropp, Michael R. Williams, Isaac Auerbach, Irving S. Reed, John von Neumann, and Bobbi Mapstone. Anecdotes: Introduction; the MAD-DIDA; 1982 Claude E. Shannon Lecture: Application transforms to coding and related topics; the von Neumann letter; interview with Irving S. Reed. *Annals of the History of Computing*, 9(3/4):357–369, July/September 1987. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3357.pdf>; <http://www.computer.org/annals/an1987/a3357abs.htm>.

[TWCD86]

**Turing:1986:MTA**

Alan Mathison Turing, Michael Woodger, B. E. Carpenter, and R. W. Doran. *A.M. Turing’s ACE report of 1946 and other papers*. Charles Babbage Institute reprint series for the history of computing ; 10. Tomash Publishers, Los Angeles, CA, USA, 1986. ISBN 0-262-03114-0. 140 + 1 pp. LCCN QA75 .A1851 1986.

**Tomayko:1991:AWF**

[TWPP91]

James E. Tomayko, Roy R. Weil, John H. Palmer, and Harry Polachek. Anecdotes: What is this. and that? first bug-discussion. Thomas J. Watson Sr. and the perfect computer. *Annals of the History of Computing*, 13(4):359–362, October/December 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a4359.pdf>; <http://www.computer.org/annals/an1991/a4359abs.htm>.

**Ulam:1980:NIM**

[Ula80]

S. M. Ulam. Von Neumann: The interaction of mathematics and computing. In Metropolis et al. [MHR80], pages 93–99. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

- [Ula82] **Ulam:1982:BJN**  
S. Ulam. Biographies: John von Neumann, 1903–1957. *Annals of the History of Computing*, 4(2):157–181, April/June 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a2157.pdf>; <http://www.computer.org/annals/an1982/a2157abs.htm>.
- [UV81] **Usdin:1981:CQD**  
Eugene Usdin and Alfred W. Van Sinderen. Comments, queries, and debate: More on the CPC configuration; the Trinity House. *Annals of the History of Computing*, 3(1):73, January/March 1981. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a1073.pdf>; <http://www.computer.org/annals/an1981/a1073abs.htm>. [Van89]
- [Val85] **Valley:1985:HSD**  
George E. Valley, Jr. How the SAGE development began. *Annals of the History of Computing*, 7(3):196–226, July/September 1985. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a3196.pdf>; <http://www.computer.org/annals/an1985/a3196abs.htm>. [Van91a]
- [Van80] **VanSinderen:1980:PPC**  
Alfred W. Van Sinderen. The printed papers of Charles Babbage. *Annals of the History of Computing*, 2(2):169–185, April/June 1980. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a2169.pdf>; <http://www.computer.org/annals/an1980/a2169abs.htm>. [Van83]
- VanSinderen:1983:BLQ**  
Alfred W. Van Sinderen. Babbage’s letter to Quetelet, May 1835. *Annals of the History of Computing*, 5(3):263–267, July/September 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3263.pdf>; <http://www.computer.org/annals/an1983/a3263abs.htm>.
- VanCreveld:1989:TWB**  
Martin L. Van Creveld. *Technology and war: from 2000 B.C. to the present*. Collier Macmillan, London, UK, 1989. ISBN 0-02-933151-X. x + 342 + [16] pp. LCCN U27 .V271 1989.
- VanCreveld:1991:TWBa**  
Martin L. Van Creveld. *Technology and war: from 2000 B.C. to the present*. Brassey’s (UK), New York, NY, USA, 1991. ISBN 0-08-041317-X. x + 342 + [16] pp. LCCN U27.V27 1991.
- VanCreveld:1991:TWBb**  
Martin L. Van Creveld. *Technology and war: from 2000 B.C. to the present*. Maxwell Macmillan

International, New York, NY, USA, 1991. ISBN 0-02-933153-6. x + 342 pp. LCCN U27 .V27 1991. A revised and expanded edition, 1st Free Press edition.

**VanSinderen:1983:RHC**

- [VBCC83] Alfred W. Van Sinderen, Allan G. Bromley, Bernard Cohen, and Paul Ceruzzi. Reviews: A. Hyman: Charles Babbage; N. Stern: from ENIAC to UNIVAC I; C. Baum: The System Builders; capsule reviews. *Annals of the History of Computing*, 5(1):76–85, January/March 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a1076.pdf>; <http://www.computer.org/annals/an1983/a1076abs.htm>.

**vandenEnde:1992:TCN**

- [vdE92] Jan van den Ende. Tidal calculations in The Netherlands, 1920–1960. *Annals of the History of Computing*, 14(3):23–33, July/September 1992. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1992/pdf/a3023.pdf>; <http://www.computer.org/annals/an1992/a3023abs.htm>.

**vanderPoel:1982:ANM**

- [vdPWB82] W. L. van der Poel, Maurice V. Wilkes, and C. L. Baker. Anecdotes: Notes from the Mathematical Centre; First SHARE 709 Committee Meeting. *Annals of the History of*

*Computing*, 4(3):275–283, July/September 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3275.pdf>; <http://www.computer.org/annals/an1982/a3275abs.htm>. Foreword by Morton I. Bernstein.

**Vernay:1989:IF**

- [Ver89] Jacques Vernay. IBM France. *Annals of the History of Computing*, 11(4):299–311, October/December 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4299.pdf>; <http://www.computer.org/annals/an1989/a4299abs.htm>.

**Verjus:1990:PGW**

- [Ver90] Jean-Pierre Verjus. Programming in Grenoble in the 1960s and those who flew from the nest. *Annals of the History of Computing*, 12(2):95–101, April/June 1990. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2095.pdf>; <http://www.computer.org/annals/an1990/a2095abs.htm>.

**Vincenti:1990:WEK**

- [Vin90] Walter G. (Walter Guido) Vincenti. *What engineers know and how they know it: analytical studies from aeronautical history*. Johns Hopkins studies in the history of technology. Johns Hopkins University Press, Bal-



- timore, MD, USA, 1990. ISBN 0-8018-3974-2. viii + 326 pp. LCCN TL515 .V44 1990. [vN82]
- [Vin93] **Vincenti:1993:WEK**  
Walter G. (Walter Guido) Vincenti. *What engineers know and how they know it: analytical studies from aeronautical history*. Johns Hopkins studies in the history of technology. Johns Hopkins University Press, Baltimore, MD, USA, 1993. ISBN 0-8018-4588-2 (paperback). viii + 326 pp. LCCN TL515 .V44 1993.
- [vN81a] **vonNeumann:1981:NPH**  
John von Neumann. The NORC and problems in high-speed computing. *Annals of the History of Computing*, 3(3):274–279, July/September 1981. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a3274.pdf>; <http://www.computer.org/annals/an1981/a3274abs.htm>. Foreword by Herman H. Goldstine. [Von89]
- [vN81b] **vonNeumann:1981:PLS**  
John von Neumann. The principles of large-scale computing machines. *Annals of the History of Computing*, 3(3):263–273, July/September 1981. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a3263.pdf>; <http://www.computer.org/annals/an1981/a3263abs.htm>. Foreword by Nancy Stern. [Voo83a]
- vonNeumann:1982:FDR**  
John von Neumann. First draft of a report on the EDVAC (1945). In Randell [Ran82], pages 383–392. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [vN88] **vonNeumann:1988:PLS**  
John von Neumann. The principles of large-scale computing machines. *Annals of the History of Computing*, 10(4):243–256, October/December 1988. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4243.pdf>; <http://www.computer.org/annals/an1988/a4243abs.htm>. Introduction by Michael R. Williams and foreword by Nancy Stern.
- Vonneuman:1989:JNF**  
Nicholas Vonneuman. John von Neumann: Formative years. *Annals of the History of Computing*, 11(3):171–175, July/September 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3171.pdf>; <http://www.computer.org/annals/an1989/a3171abs.htm>.
- Voorhees:1983:CAS**  
Edward A. Voorhees. 2 & 13. computing at Los Alamos Scientific Laboratory with the 701. *Annals of the History of Computing*, 5(2):177–178,

- April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2177a.pdf>; <http://dlib.computer.org/an/books/an1983/pdf/a2177b.pdf>; <http://www.computer.org/annals/an1983/a2177aabs.htm>; <http://www.computer.org/annals/an1983/a2177babs.htm>. [Wad00]
- [Voo83b] Edward A. Voorhees. Los Alamos debugging programs and techniques as used on the IBM 701. *Annals of the History of Computing*, 5(2):180–182, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2180.pdf>; <http://www.computer.org/annals/an1983/a2180abs.htm>. [Wal79]
- [VTAA00] Jan Van der Spiegel, James F. Tau, Titiimaea F. Ala'ilima, and Lin Ping Ang. The ENIAC: history, operation, and reconstruction in VLSI. In Rojas and Hashagen [RH00], pages 121–178. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17.F57 2000.
- [VW91] Alfred W. Van Sinderen and Michael R. Williams. Happy birthday Mr. Babbage. *Annals of the History of Computing*, 13(2):125–139, April/June 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2125.pdf>; <http://www.computer.org/annals/an1991/a2125abs.htm>. [Wada:2000:PCP]
- Eiiti Wada. The Parametron Computer PC-1 and its initial input routine. In Rojas and Hashagen [RH00], pages 435–452. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17.F57 2000.
- [Walker:1979:WCR] Virginia C. Walker. Washington computer reminiscences. *Annals of the History of Computing*, 1(1):65–67, July/September 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1065.pdf>; <http://www.computer.org/annals/an1979/a1065abs.htm>.
- [Walker:1980:MRC] Virginia C. Walker. Meetings in retrospect: COBOL—A Monument to Cooperation: 1979 NCC Pioneer Day. *Annals of the History of Computing*, 2(1):79–82, January/March 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a1079.pdf>; <http://www.computer.org/annals/an1980/a1079abs.htm>.
- [VanderSpiegel:2000:EHO] Jan Van der Spiegel, James F. Tau, Titiimaea F. Ala'ilima, and Lin Ping Ang. The ENIAC: history, operation, and reconstruction in VLSI. In Rojas and Hashagen [RH00], pages 121–178. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17.F57 2000.
- [Voorhees:1983:ADP] Edward A. Voorhees. Los Alamos debugging programs and techniques as used on the IBM 701. *Annals of the History of Computing*, 5(2):180–182, April/June 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a2177a.pdf>; <http://dlib.computer.org/an/books/an1983/pdf/a2177b.pdf>; <http://www.computer.org/annals/an1983/a2177aabs.htm>; <http://www.computer.org/annals/an1983/a2177babs.htm>. [Wad00]

- org/annals/an1980/a1079abs.htm.
- [Wal81] Virginia C. Walker. Meetings in retrospect: Blueprint for success — Pioneer Day 1981. *Annals of the History of Computing*, 3(4):400–407, October/December 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a4400.pdf>.
- [Ware:1986:AR] Willis H. Ware. AFIPS in retrospect. *Annals of the History of Computing*, 8(3):303–310, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3303.pdf>; <http://www.computer.org/annals/an1986/a3303abs.htm>.
- [Wat90] Thomas J. Watson Jr. *Father Son & Co.: My Life at IBM and Beyond*. Bantam Books, New York, NY, USA, 1990. ISBN 0-553-07011-8. xi + 468 + 32 pp. LCCN HD9696.C64 I4887 1990. Memoirs of IBM President Watson, the son of the founder of IBM.
- [WCB90] Eric A. Weiss, Richard Canning, and John M. Bennett. Biographies: Obituaries: José Garcia Santesmases, 1907–1989; Roy Nutt, 1931–1990; Florence Jessie MacWilliams, 1917–1990; Charlotte Boschan, 1920–1990; memoirs: Early days of electronics at IBM; early computer days in Britain and Australia — some autobiographical snippets. *Annals of the History of Computing*, 12(4):277–285, October/December 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4277.pdf>; <http://www.computer.org/annals/an1990/a4277abs.htm>.
- [WD85] M. R. Williams and Rosamond W. Dana. Meetings in retrospect: Pioneer Day 7984: Lawrence Livermore National Laboratory; Twentieth Anniversary of DODCI. *Annals of the History of Computing*, 7(2):179–183, April/June 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a2179.pdf>; <http://www.computer.org/annals/an1985/a2179abs.htm>.
- [Wei82] Eric A. Weiss. Biographies. *Annals of the History of Computing*, 4(1):65, January/March 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1065.pdf>; <http://www.computer.org/annals/an1982/a1065abs.htm>.

- Weiss:1985:CQD**
- [Wei85a] Eric A. Weiss. Comments, queries, and debate: The number 2-B regrettor. *Annals of the History of Computing*, 7(2):167–176, April/June 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a2167.pdf>; <http://www.computer.org/annals/an1985/a2167abs.htm>.
- Weiss:1985:JSC**
- [Wei85b] Eric A. Weiss. Jonathan Swift's computing invention. *Annals of the History of Computing*, 7(2):164–165, April/June 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a2164.pdf>; <http://www.computer.org/annals/an1985/a2164abs.htm>.
- Weiss:1988:BEC**
- [Wei88a] Eric A. Weiss. Biographies: Edmund C. Berkeley; Neil D. MacDonald; Herbert S. Bright. *Annals of the History of Computing*, 10(3):216–218, July/September 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a3216.pdf>; <http://www.computer.org/annals/an1988/a3216abs.htm>.
- Weiss:1988:BGH**
- [Wei88b] Eric A. Weiss. Biographies: George H. Brown and Richard P. Feynman. *Annals of the History of Computing*, 10(2):140–142, April/June 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a2140.pdf>; <http://www.computer.org/annals/an1988/a2140abs.htm>.
- Weiss:1988:BJG**
- [Wei88c] Eric A. Weiss. Biographies: John Grist Brainerd. *Annals of the History of Computing*, 10(1):78–79, January/March 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1078.pdf>; <http://www.computer.org/annals/an1988/a1078abs.htm>.
- Weiss:1988:BOP**
- [Wei88d] Eric A. Weiss. Biographies: Oh, pioneers! *Annals of the History of Computing*, 10(4):348–361, October/December 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4348.pdf>; <http://www.computer.org/annals/an1988/a4348abs.htm>.
- Weiss:1989:BMM**
- [Wei89a] Eric A. Weiss. Biographies: Morton Michael Astrahan, 1925–1988; James L. Buie, 1920–1988; George S. Dively, 1903–1988; Rita Goldberg

- Minker, 1927–1988; Lewis Winner, 1906–1988; Abacus, 1983–1988. *Annals of the History of Computing*, 11(1):49–51, January/March 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a1049.pdf>; <http://www.computer.org/annals/an1989/a1049abs.htm>. [Wei91b]
- Weiss:1989:BOW**
- [Wei89b] Eric A. Weiss. Biographies: Obituaries: William B. Shockley, 1910–1989; Jan A. Rajchman, 1911–1989; Gordon D. Goldstein, 1917–1989; John E. Ward, 1920–1988; Kent K. Curtis, 1927–1987. *Annals of the History of Computing*, 11(4):326–329, October/December 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4326.pdf>; <http://www.computer.org/annals/an1989/a4326abs.htm>. [Wei91c]
- Weiss:1991:BOA**
- Eric A. Weiss. Biographies: Obituary: AFIPS: 1961–1991. *Annals of the History of Computing*, 13(1):100–101, January/March 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1100.pdf>; <http://www.computer.org/annals/an1991/a1100abs.htm>. [Wei91d]
- Weiss:1991:EMH**
- Eric A. Weiss. Erratum: [Mark Halpern, “On the heels of the pioneers”]. *Annals of the History of Computing*, 13(3):289–290, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3285.pdf>; <http://www.computer.org/annals/an1991/a3285abs.htm>. See [Hal91].
- Wells:1980:REA**
- [Wei91a] Michael F. Weisbard. Corrections: About this Issue, 12(4). *Annals of the History of Computing*, 13(3):307–308, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3306.pdf>; <http://www.computer.org/annals/an1991/a3306abs.htm>. See [Lee90c]. [Wei80]
- Mark B. Wells. Reflections on

the evolution of algorithmic language. In Metropolis et al. [MHR80], pages 275–289. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Welchman:1982:HSS**

- [Wel82] Gordon Welchman. *The Hut Six story: breaking the Enigma codes*. McGraw-Hill, New York, NY, USA, 1982. ISBN 0-07-069180-0. ix + 326 pp. LCCN D810.C88 W44.

**Wexelblat:1981:HPL**

- [Wex81] Richard L. Wexelblat, editor. *History of programming languages*. ACM monograph series. Academic Press, New York, NY, USA, 1981. ISBN 0-12-745040-8. xxiii + 758 pp. LCCN QA76.7 .H56 1978. Proceedings of the History of Programming Languages Conference, Los Angeles, CA, USA, June 1–3, 1978.

**Wexelblat:1993:SAS**

- [Wex93] Richard L. Wexelblat. *The Second ACM SIGPLAN History of Programming Languages Conference (HOPL-II), April 20–23, 1993, Cambridge, Massachusetts, USA: preprints*. ACM Press, New York, NY, USA, 1993. ISBN 0-89791-570-4 (paperback), 0-89791-571-2. xii + 370 pp. LCCN QA76.7 .A1095 v.28 no.3 1993.

[WG82]

Also published as ACM SIGPLAN notices, vol. 28, number 3, March 1993.

**Wilkes:1982:MRJ**

Maurice V. Wilkes and I. J. Good. Meetings in retrospect: J. G. Brainerd on the ENIAC; A Report on T. H. Flowers’s Lecture on Colossus. *Annals of the History of Computing*, 4(1):53–59, January/March 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a1053.pdf>; <http://www.computer.org/annals/an1982/a1053abs.htm>.

**Weiss:1990:BAP**

[WG90]

Eric A. Weiss and David Gries. Biographies: Andri Petrovich Ershov (1931–1988). *Annals of the History of Computing*, 12(1):61–62, January/March 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a1061.pdf>; <http://www.computer.org/annals/an1990/a1061abs.htm>. Reprinted from Computing Research News 1, 1, Summer 1989, with permission.

**Williams:1984:MRH**

[WH84]

M. R. Williams and Cuthbert C. Hurd. Meeting in retrospect: Howard Aiken and the Harvard Computation Laboratory; Aiken observed. *Annals of the History of Computing*, 6(2):157–162, April/

June 1984. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1984/pdf/a2157.pdf>; <http://www.computer.org/annals/an1984/a2157abs.htm>.

**Whitemore:1987:BC**

[WH87] Hugh Whitemore and Andrew Hodges. *Breaking the code*. Amber Lane, Oxford, UK, 1987. ISBN 0-906399-80-7. 80 pp. LCCN PR6073.H577 B73 1987. Based on the book 'Alan Turing, the Enigma,' by Andrew Hodges.

**Ware:1986:PQC**

[WHG+86] Willis H. Ware, Edwin L. Harder, Bruce Gilchrist, Paul Armer, Richard I. Tanaka, Keith W. Uncapher, Walter L. Anderson, George Glaser, Anthony Ralston, Theodore J. Williams, Albert S. Hoagland, J. Ralph Leatherman, Sylvia Charp, and Stephen S. Yau. Perspectives on a quarter-century: AFIPS Presidents. *Annals of the History of Computing*, 8(3):275-302, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3275.pdf>; <http://www.computer.org/annals/an1986/a3275abs.htm>.

**Wieser:1983:CCS**

[Wie83] C. Robert Wieser. The Cape Cod system. *Annals*

*of the History of Computing*, 5(4):362-369, October/December 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a4362.pdf>; <http://www.computer.org/annals/an1983/a4362abs.htm>.

**Williams:1970:CC**

[Wil70] Richard Hugh Williams. *Computers and chip*. Computer Consultants Limited, Llandudno (G.P.O. Box 8, Llandudno, Caernarvonshire), Wales, 1970. ISBN 0-901250-01-5. 6 + 82 pp.

**Williams:1979:HJA**

[Wil79] John Williams. The history of the JOHNNIAC: Appendix A. *Annals of the History of Computing*, 1(1):60-64, July/September 1979. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1979/pdf/a1049.pdf>; <http://www.computer.org/annals/an1979/a1049abs.htm>.

**Wilkes:1980:EPD**

[Wil80a] M. V. Wilkes. Early programming developments in Cambridge. In Metropolis et al. [MHR80], pages 497-501. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10-15 June 1976.

**Wilkinson:1980:TWN**

- [Wil80b] J. H. Wilkinson. Turing's work at the National Physical Laboratory and the construction of Pilot ACE, DEUCE, and ACE. In Metropolis et al. [MHR80], pages 101–114. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976. [Wil82]

**Wilkes:1981:DCU**

- [Wil81a] M. V. Wilkes. The design of a control unit — reflections on reading Babbage's notebooks. *Annals of the History of Computing*, 3(2):116–120, April/June 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a2116.pdf>; <http://www.computer.org/annals/an1981/a2116abs.htm>. [Wil85a]

**Williams:1981:SLC**

- [Wil81b] M. R. Williams. The scientific library of Charles Babbage. *Annals of the History of Computing*, 3(3):235–240, July/September 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a3235.pdf>; <http://www.computer.org/annals/an1981/a3235abs.htm>. [Wil85b]

**Williams:1982:MRC**

M. R. Williams. Meetings in retrospect: CIPS '82 — History Session. *Annals of the History of Computing*, 4(3):274, July/September 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3274.pdf>; <http://www.computer.org/annals/an1982/a3274abs.htm>.

**Williams:1983:NLU**

M. R. Williams. From Napier to Lucas: The use of Napier's bones in calculating instruments. *Annals of the History of Computing*, 5(3):279–296, July/September 1983. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a3279.pdf>; <http://www.computer.org/annals/an1983/a3279abs.htm>.

**Wilkes:1985:MCP**

M. V. (Maurice Vincent) Wilkes. *Memoirs of a computer pioneer*. MIT Press series in the history of computing. MIT Press, Cambridge, MA, USA, 1985. ISBN 0-262-23122-0. viii + 240 pp. LCCN QA76.17 .W55 1985.

**Williams:1985:CHC**

M. R. Williams. A course in the history of computation. *Annals of the History of Computing*, 7(3):241–244, July/September 1985. CODEN AH-



- COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a3241.pdf>; <http://www.computer.org/annals/an1985/a3241abs.htm>. [Wil86]
- [Wil85c] M. R. Williams. Meetings in retrospect: History of computers in Canada. *Annals of the History of Computing*, 7(1):63–65, January/March 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a1063.pdf>; <http://www.computer.org/annals/an1985/a1063abs.htm>. [Wil87]
- [Wil85d] Michael R. (Michael Roy) Williams. *A history of computing technology*. Prentice-Hall series in computational mathematics. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 1985. ISBN 0-13-389917-9. xi + 432 pp. LCCN QA71 .W661 1985. [Wil88]
- [Wil85e] W. R. Williams, editor. *Looking back to tomorrow: a survey of the impact of the first twenty-five years of the use of electronic computers in New Zealand together with some thoughts for the future*. New Zealand Computer Society, Wellington, New Zealand, 1985. ISBN 0-13-389917-9. 210 + 12 pp. LCCN QA71 .W661 1985. [Wil89]
- Wilkes:1986:GM**
- M. V. Wilkes. The genesis of microprogramming. *Annals of the History of Computing*, 8(2):116–126, April/June 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a2116.pdf>; <http://www.computer.org/annals/an1986/a2116abs.htm>.
- Williams:1985:MRH**
- Williams:1987:BBT**
- Michael R. Williams. Babbage and Bowditch: a transatlantic connection. *Annals of the History of Computing*, 9(3/4):283–290, July/September 1987. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1987/pdf/a3283.pdf>; <http://www.computer.org/annals/an1987/a3283abs.htm>.
- Williams:1985:HCT**
- Williams:1988:IPP**
- Michael R. Williams. Introduction: The promptuary papers. *Annals of the History of Computing*, 10(1):35–36, January/March 1988. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a1035.pdf>; <http://www.computer.org/annals/an1988/a1035abs.htm>.
- Williams:1985:LBT**
- Williams:1989:MA**
- Michael R. Williams. Museums and archives. *An-*

- nals of the History of Computing*, 11(4):313–319, October/December 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a4313.pdf>; <http://www.computer.org/annals/an1989/a4313abs.htm>. [Wil97]
- Williams:1990:MA**
- [Wil90] Michael Williams. Museums and archives. *Annals of the History of Computing*, 12(4):287–290, October/December 1990. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4287.pdf>; <http://www.computer.org/annals/an1990/a4287abs.htm>. [Wil00]
- Wilkes:1991:BEH**
- [Wil91a] Maurice V. Wilkes. Babbage’s expectations for his Engines. *Annals of the History of Computing*, 13(2):141–145, April/June 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2141.pdf>; <http://www.computer.org/annals/an1991/a2141abs.htm>. [Win86a]
- Wilkes:1991:PMB**
- [Wil91b] Maurice V. Wilkes. Pray Mr. Babbage — a character study in dramatic form. *Annals of the History of Computing*, 13(2):147–154, April/June 1991. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2147.pdf>; <http://www.computer.org/annals/an1991/a2147abs.htm>.
- Williams:1997:HCT**
- Michael R. (Michael Roy) Williams. *A history of computing technology*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, second edition, 1997. ISBN 0-8186-7739-2. xi + 426 pp. LCCN QA76.17 .W56 1997.
- Williams:2000:PTC**
- Michael R. Williams. A preview of things to come: some remarks on the first generation of computers. In Rojas and Hashagen [RH00], pages 1–13. ISBN 0-262-18197-5 (hardcover), 0-585-35535-5 (electronic). LCCN QA76.17 .F57 2000.
- Winston:1986:MMa**
- Brian Winston. *Misunderstanding media*. Routledge and Kegan Paul, New York, NY, USA, 1986. ISBN 0-7102-0002-1. xi + 419 pp. LCCN P96.T42 W5 1986b. UK £20.00.
- Winston:1986:MMb**
- Brian Winston. *Misunderstanding media*. Harvard University Press, Cambridge, MA, USA, 1986. ISBN 0-674-57663-2. xi + 419 pp. LCCN P96.T42 W51 1986.

- [Win98] **Winston:1998:MTS**  
 Brian Winston. *Media technology and society: a history: from the telegraph to the Internet*. Routledge & Kegan Paul, London, UK and New York, NY, USA, 1998. ISBN 0-415-14229-6, 0-415-14230-X (paperback). xiv + 374 pp. LCCN P96.T42 W49 1998.
- [WIR91] **Weiss:1991:BOJ**  
 Eric A. Weiss, Roland Ibett, and D. J. Rees. Biographies: Obituaries: John Bardeen, 1909–1991; Sidney Fernbach, 1918–1991; Sidney Michaelson, 1926–1991; Charles R. Mollenhoff, 1922–1991. *Annals of the History of Computing*, 13(3):285–289, July/September 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a3285.pdf>; <http://www.computer.org/annals/an1991/a3285abs.htm>.
- [WK82] **Williams:1982:EDC**  
 F. C. Williams and T. Kilburn. Electronic digital computers (1948). In Randell [Ran82], pages 415–416. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- [WK89] **Weiss:1989:BOC**  
 Eric A. Weiss and Thomas E. Kurtz. Biographies: Obituary: The Computer and Information Systems Program at Dartmouth College (CIS).
- [WLC86] **Wilkes:1986:RMC**  
 Maurice V. Wilkes, J. A. N. Lee, and Paul E. Ceruzzi. Reviews: M. Campbell-Kelly and M. R. Williams (eds.), *The Moore School Lectures; Computer Museum Slide Set*; K. Zuse. *Der Computer, Mein Lebenswerk*; capsule reviews. *Annals of the History of Computing*, 8(3):315–319, July/September 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3315.pdf>; <http://www.computer.org/annals/an1986/a3315abs.htm>.
- [WLC85] **Wildes:1985:CEE**  
 Karl L. Wildes and Nilo A. Lindgren. *A century of electrical engineering and computer science at MIT, 1882–1982*. MIT Press, Cambridge, MA, USA, 1985. ISBN 0-262-23119-0. xi + 423 pp. LCCN TK210.M3 W55 1985.
- [WLMH82] **Warren:1982:MSE**  
 C. A. Warren, B. McMillan, and B. D. Holbrook. Military systems engineering and research. *Annals of the History of Computing*, 11(2):143, April/June 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a2143.pdf>; <http://www.computer.org/annals/an1989/a2143abs.htm>.

- Computing*, 4(3):236–244, July/September 1982. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a3218.pdf>; <http://www.computer.org/annals/an1982/a3218abs.htm>. [WP00]
- Weiss:1989:CQD**
- [WMS<sup>+</sup>89] Eric A. Weiss, Rex Malik, H. E. Salzer, The Editor, and Herbert R. J. Grosch. Comments, queries, and debate: The Real Time Club; New York Mathematical Tables Project; early small computers; Ada's First Stirring. *Annals of the History of Computing*, 11(1):51–54, January/March 1989. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a1051.pdf>; <http://www.computer.org/annals/an1989/a1051abs.htm>. [WR81]
- Worsley:1982:ED**
- [Wor82] B. H. Worsley. The EDSAC demonstration (1949). In Randell [Ran82], pages 423–429. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982. Prepared for W. Renwick. [WR82]
- Worthy:1987:WCN**
- [Wor87] James C. Worthy. *William C. Norris: portrait of a maverick*. Ballinger Pub. Co., Cambridge, MA, USA, 1987. ISBN 0-88730-087-1. xiv + 259 pp. LCCN HD9696.C62 N6891 1987.
- Watson:2000:FSC**
- Thomas J. Watson and Peter Petre. *Father, Son and Co.: my life at IBM and beyond*. Bantam Books, New York, NY, USA, 2000. ISBN 0-553-38083-4 (paperback). xi + 468 + [32] pp. LCCN HD9696.C64 I489 2000. US\$14.95.
- Walker:1981:MRH**
- Virginia C. Walker and James L. Rogers. Meetings in retrospect: To Honor Our Beginnings — ACM'80; Atanasoff Speaks at Digital Computer Museum. *Annals of the History of Computing*, 3(2):183–186, April/June 1981. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1981/pdf/a2183.pdf>; <http://www.computer.org/annals/an1981/a2183abs.htm>.
- Wilkes:1982:E**
- M. V. Wilkes and W. Renwick. The EDSAC (1949). In Randell [Ran82], pages 417–421. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.
- Wilkes:1986:RKW**
- M. V. Wilkes and K. W. Smillie. Reviews: K. L. Wildes and N. Lindgren, A Century of Electrical Engineering and Computer Science at MIT; J. G. Kemeny and T. E. Kurtz, Back to BASIC; capsule reviews. *Annals of the History of*

- Computing*, 8(1):94, 96–98, January/March 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a1094.pdf>; <http://www.computer.org/annals/an1986/a1094abs.htm>.
- [WSC<sup>+</sup>88] **Williams:1988:MAI** M. R. Williams, Oliver B. R. Strimpel, Paul Ceruzzi, William Jacobs, Doron Swade, Joachim Fisher, W. Aspray, Joyce E. Bedi, Nancy R. McGovern, Geoffrey Tweedale, Walter Carlson, and Pierre E. Mounier-Kuhn. *Museums and archives: Introduction; The Computer Museum, Boston; Beyond the Limits: A New Gallery at the National Air and Space Museum, Smithsonian Institution, Washington, D.C.; The Information Age: Visions and Realities; Deutsches Museum, Munich Computer Science and Automation Hall; Charles Babbage Institute: Center for the History of Information Processing; The IEEE Center for the History of Electrical Engineering; Records in the National Archives Relating to the Early Involvement of the U.S. Government in Data Processing, 7880s to 7950s; British National Archive for the History of Computing; AFIPS History of Computing Committee; History of Computing in France.* *Annals of the History of Computing*, 10(4):305–329, October/December 1988. CODEN AH-
- COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1988/pdf/a4305.pdf>; <http://www.computer.org/annals/an1988/a4305abs.htm>.
- Weiss:1991:BAS** Eric A. Weiss and Carolyn E. Tajnai. Biographies: Arthur L. Samuel (1901–1990); John Bardeen (1908–1991); Velma E. R. Huskey (1917–1991). *Annals of the History of Computing*, 13(2):229–230, April/June 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2229.pdf>; <http://www.computer.org/annals/an1991/a2229abs.htm>.
- Wieselman:1991:MPPa** Irving L. Wieselman and Erwin Tomash. Marks on paper: Part 1. A historical survey of computer output printing. *Annals of the History of Computing*, 13(1):63–79, January/March 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1063.pdf>; <http://www.computer.org/annals/an1991/a1063abs.htm>.
- Wieselman:1991:MPPb** Irving L. Wieselman and Erwin Tomash. Marks on paper: Part 2. A historical survey of computer output printing. *Annals of the History*
- [WT91a] **Williams:1988:MAI** M. R. Williams, Oliver B. R. Strimpel, Paul Ceruzzi, William Jacobs, Doron Swade, Joachim Fisher, W. Aspray, Joyce E. Bedi, Nancy R. McGovern, Geoffrey Tweedale, Walter Carlson, and Pierre E. Mounier-Kuhn. *Museums and archives: Introduction; The Computer Museum, Boston; Beyond the Limits: A New Gallery at the National Air and Space Museum, Smithsonian Institution, Washington, D.C.; The Information Age: Visions and Realities; Deutsches Museum, Munich Computer Science and Automation Hall; Charles Babbage Institute: Center for the History of Information Processing; The IEEE Center for the History of Electrical Engineering; Records in the National Archives Relating to the Early Involvement of the U.S. Government in Data Processing, 7880s to 7950s; British National Archive for the History of Computing; AFIPS History of Computing Committee; History of Computing in France.* *Annals of the History of Computing*, 10(4):305–329, October/December 1988. CODEN AH-
- [WT91b] **Wieselman:1991:MPPa** Irving L. Wieselman and Erwin Tomash. Marks on paper: Part 1. A historical survey of computer output printing. *Annals of the History of Computing*, 13(1):63–79, January/March 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a1063.pdf>; <http://www.computer.org/annals/an1991/a1063abs.htm>.
- [WT91c] **Wieselman:1991:MPPb** Irving L. Wieselman and Erwin Tomash. Marks on paper: Part 2. A historical survey of computer output printing. *Annals of the History*

- of *Computing*, 13(2):203–222, April/June 1991. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1991/pdf/a2203.pdf>; <http://www.computer.org/annals/an1991/a2203abs.htm>. [WTZ90]
- Weiss:1985:RCM**
- [WTE<sup>+</sup>85] Eric A. Weiss, Henry S. Tropp, Ralph Erskine, John A. N. Lee, Gwen Bell, and M. R. Williams. Reviews: The Computer Museum and J. Bernstein, Three Degrees Above Zero: Bell Labs in the Information Age and D. R. Hartree, Calculating Machines: Recent and Prospective Developments and Their Impact on Mathematical Physics, and, Calculating Instruments and Machines and W. Kozaczuk, Enigma: How the German Machine Cipher Was Broken and How It Was Read by the Allies in World War Two and S. Levy, Hackers and A. Osborne and J. Dvorak, Hypergrowth: The Rise and Fall of Osborne Computer Corporation and E. W. Pugh, Memories that Shaped an Industry and capsule reviews. *Annals of the History of Computing*, 7(3):258–277, July/September 1985. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1985/pdf/a3258.pdf>; <http://www.computer.org/annals/an1985/a3258abs.htm>. [WZ89]
- Weiss:1990:BAJ**
- Eric E. Weiss, Geoffrey Tweedale, and Heinz Zemanek. Biographies: Alan J. Perlis, 1922–1990; Bertram Vivian Bowden, 1910–1989; William P. Hanf, 1933–1989; Marcel Linsman, 1913–1989; Harriett B. Rigas, 1933–1989; Louis Robinson, 1926–1985; an interview with Jan Rajchman. *Annals of the History of Computing*, 12(2):137–146, April/June 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a2137.pdf>; <http://www.computer.org/annals/an1990/a2137abs.htm>.
- Weiss:1992:BEA**
- [WWCP92] Eric A. Weiss, Michael R. Williams, John W. Carr III, and Noah Prywes. Biographies: Elogé: Arthur Lee Samuel (1901–1990); Joseph Clement: The first computer engineer; Saul Gorn (1913–1992). *Annals of the History of Computing*, 14(3):55–77, July/September 1992. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1992/pdf/a3055.pdf>; <http://www.computer.org/annals/an1992/a3055abs.htm>.
- Weiss:1989:BEA**
- Eric A. Weiss and Heinz Zemanek. Biographies: Elogé: Adriaan van Wijn-

- gaarden (1916–1987); Robert A. Henle, 1925–1989. *Annals of the History of Computing*, 11(3):210–225, July/September 1989. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1989/pdf/a3210.pdf>; <http://www.computer.org/annals/an1989/a3210abs.htm>. [Zem80]
- [Yat89] JoAnne Yates. *Control through communication: the rise of system in American management*, volume 6 of *Studies in industry and society*. Johns Hopkins University Press, Baltimore, MD, USA, 1989. ISBN 0-8018-3757-X. xx + 339 pp. LCCN HD30.3 .Y381 1989.
- [Yau86] Stephen S. Yau. Introduction. *Annals of the History of Computing*, 8(3):216, July/September 1986. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a3216.pdf>; <http://www.computer.org/annals/an1986/a3216abs.htm>.
- [Zem79] Heinz Zemanek, editor. *Al-Khorezmi: His background, his personality, his work and his influence; paper read at the Symposium on Algorithms in Modern Mathematics and Computer Science, dedicated to Al-Khorezmi in Urgench (Khoresm Region, Uzbek S.S.R.), Sept. 16–22, 1979. ????, ????, 1979.* ISBN ????? LCCN ?????
- Zemanek:1980:CEP**
- H. Zemanek. Central European prehistory of computing. In Metropolis et al. [MHR80], pages 587–609. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976. Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.
- Zemanek:1982:EVM**
- [Zem82] Heinz Zemanek. Eloge: Victor Mikhaylovich Glushkov, 1923–1982. *Annals of the History of Computing*, 4(2):100–101, April/June 1982. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1982/pdf/a2100.pdf>; <http://www.computer.org/annals/an1982/a2100abs.htm>.
- Zemanek:1983:AAP**
- [Zem83] Heinz Zemanek. Anecdotes: Algorithmic perfection. *Annals of the History of Computing*, 5(1):73, January/March 1983. CODEN AHCOE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1983/pdf/a1073.pdf>; <http://www.computer.org/annals/an1983/a1073abs.htm>.
- Zates:1989:CTC**
- Yau:1986:I**
- Zemanek:1979:AKH**

- [Zem90a] **Zemanek:1990:ALF**  
 Heinz Zemanek. Another look into the future of information processing, 20 years later. *Annals of the History of Computing*, 12(4):253–260, October/December 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4253.pdf>; <http://www.computer.org/annals/an1990/a4253abs.htm>. Translated by Werner Buchholz. [Zus70]
- [Zem90b] **Zemanek:1990:LFI**  
 Heinz Zemanek. A look into the future of information processing (translated by Werner Buchholz). *Annals of the History of Computing*, 12(4):241–251, October/December 1990. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1990/pdf/a4241.pdf>; <http://www.computer.org/annals/an1990/a4241abs.htm>. [Zus80a]
- [ZT86] **Zemanek:1986:RSA**  
 Heinz Zemanek and James E. Tomayko. Reviews: Stan Aurgarten, Bit by Bit; Dorothy Stein, Ada, A Life and a Legacy; capsule reviews. *Annals of the History of Computing*, 8(4):380, 382–383, October/December 1986. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1986/pdf/a4380.pdf>; <http://www.computer.org/annals/an1986/a4380abs.htm>. [Zus80b]
- Zuse:1970:CML**  
 Konrad Zuse. *Der Computer, mein Lebenswerk*. Verlag moderne Industrie, München, Germany, 1970. 221 pp. LCCN QA76.2.Z8 A3.
- Zuse:1980:CQD**  
 Konrad Zuse. Comments, queries, and debate: Comments on Randell's bibliography. *Annals of the History of Computing*, 2(2):186–187, April/June 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a2186b.pdf>; <http://www.computer.org/annals/an1980/a2186babs.htm>. [Zus80c]
- Zuse:1980:IGC**  
 Konrad Zuse. Installation of the German computer Z4 in Zurich in 1950. *Annals of the History of Computing*, 2(3):239–241, July/September 1980. CODEN AH-COE5. ISSN 0164-1239. URL <http://dlib.computer.org/an/books/an1980/pdf/a3239.pdf>; <http://www.computer.org/annals/an1980/a3239abs.htm>.
- Zuse:1980:SRH**  
 Konrad Zuse. Some remarks on the history of computing in Germany. In Metropolis et al. [MHR80], pages 611–627. ISBN 0-12-491650-3, 1-4832-9668-7 (e-book). LCCN QA75.5 .I63 1976.



Original versions of these papers were presented at the International Research Conference on the History of Computing, held at the Los Alamos Scientific Laboratory, 10–15 June 1976.

**Zuse:1982:MAE**

- [Zus82a] Konrad Zuse. Method for automatic execution of calculations with the aid of computers (1936). In Randell [Ran82], pages 163–170. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.

**Zuse:1982:OCD**

- [Zus82b] Konrad Zuse. The outline of a computer development from mechanics to electronics (1962). In Randell [Ran82], pages 175–190. ISBN 0-387-11319-3, 3-540-11319-3. LCCN TK7885.A5 O741 1982.

**Zuse:1984:CML**

- [Zus84] Konrad Zuse. *Der Computer, mein Lebenswerk*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1984. ISBN 0-387-13814-5 (U.S.). xv + 218 pp. LCCN TK7885.22.Z87 A33 1984. Based on the author's autobiography with the same title published in 1970.

**Zuse:1993:CML**

- [Zus93] Konrad Zuse. *The Computer, My Life*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1993. ISBN 3-540-56453-5 (Berlin), 0-387-56453-5

(New York). 245 pp. LCCN TK7885.22.Z87 A3 1993.