

Record Series Number



11/15/20
Engineering
Computer Science
James E. Robertson Papers, 1942-93

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Fast Switching Experiment Glass Slides

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Burks, Goldstine & von Neumann, Logical Design of an Electronic Computer 1946-47
Computer Memory Improvement article in C-U Gazette, Feb. 8, 1949
"Preliminary Design of an Arithmetic Unit for...Binary Digital Computer," by J.E.R., June 23, 1950
Ordvac article in Daily Oklahoman, Jan. 18, 1952
Time, Jan. 28, 1952
Electronic Computer article in Illinois Alumni News, Feb., 1952
St. Louis Post-Dispatch, June 8, 1952

Computer Trip Reports, 1952-57
 Retirement System, 1952-73
 Broyles Bills, Committee to Oppose, 1953
 Computer Operation Notes, 1953-54
 Amer. Soc. For Engineering Education visit to computer article in C-U Courier, June 18, 1954
 Illiac
 Article in C-U Courier, July 1, 1954
 Equipment and Specifications Correspondence, 1954-62
 Memory Capacity article in C-U Courier, June 1956
 Programming and Mathematical Modeling Correspondence, 1954-62
 Personnel, DCL, 1956-57
 Pilot's Log, 1956
 Publication and Reviewer Correspondence, 1957-62
 University of Michigan, Summer Lecture Announcements, 1956, 1959-60
 Arithmetic Notebook, 1957-60
 Soviet Union, visit to Digital Computer Installations, 1958
 Travel Arrangements, February 1960
 Russian Trip (2 folders), 1958
 "Digital Division" by J.E.R., 1958, 1965, 1973
 Divilbiss, James, 1959
 Yoeli, Michael, 1959
 A.E.C. Oak Ridge Contract AT (11-1) 415, Patent Case, 1959-61
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 U.S.A.I.D., International Cooperation, India, 1963
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 Division, SRT Analysis, Shively, 1963
 DCL curriculum, 1963
 Electrochemical Storage, Bruce Briely, 1963
 Seminars, 1963
 Illiac III, McCormick, 1963-65
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 National Electronics Conference (NEC), 1966
 ACM lectures, Penn State, Illinois, Binghamton, 1967
 IEEE Computer Conference, Chicago, "Deterministic Procedure...Adders and Subtractors"
 Sept. 6-8, 1967
 Nuspl, Stephen J., Finite Field Based Modeling, 1968
 Brookhaven, 1968
 Intl. Federation for Information Processing Computer Exhibition, Edinburgh, Aug. 5-10,
 1968
 Illiac III, Logic, Circuits, Memory, Semiconductors Manual, 1966-68
 Circuit Manual, updated Logic, Sept. 15, 1969
 Parallel Digital Arithmetic Unit Patent 3,462,589, Aug. 19, 1969
 Long-Range Plans, January-May 1969
 IEEE, Computer Arithmetic Workshop, Minneapolis, June 16, 1969
 Brookhaven (4 folders), 1969-72
 Computer Science Department, ca. 1970
 Computer History, ca. 1970
 Chen, Tze Tzong, Feb. 1970
 IEEE Paper, Aug. 1970
 Course Announcements, 1971-72
 Control Data, Star 100 Manual, 1972
 Illiac III, 1971-72
 A.E.C. AT (11-1) 2118, image processing, 1971-72

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Star Computer, JPL, Stanford, 1972
 Illiac III, 1972

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 Univ. of Texas, Computer Science Dept., 1974-75
 Brewery, 1973-74
 Computer Science - EE Liaison Committee, 1977-80
 IEEE Computer Arithmetic Symposium, Univ. of Maryland, 15-16 May 1978
 The ORDVAC and the ILLIAC, 1978-80
 Decomposition Theory, Manuscripts & Notes (2 folders), 1979-83
 Theory of Decomposition of Structures for Binary Addition & Subtraction, 1983
 Research Reports by J.E.R., 1983, 1987
 Papers & Notes, 1983-88
 Array X, 1984
 7th Symposium on Computer Arithmetic, 4-6 June 1985
 Higher Radix Extensions of Hamming Codes, 8th Symposium on Computer Arithmetic,
 1986
 Design for Twos Complement Array Multiplier, 1986
 Drafts, Nov. 5-25, 1986
 Gear, Bill, 1987
 Error Detection Through Higher Radix Extensions of Hamming Codes, 1987
 Illiac History, 1988

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 NSF Contract GJ 38204, Acct. 365, April 1973, March 1975
 DCR 73-07998, Acct. 365, April 1975-1978
 MCS 77-18642, Acct. 323, 1972-80
 MCS 80-00058, Acct. 683, 1980-82
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 NSF Awards Summaries, 1973, 1975-76
 Argonne Natl. Laboratory, Large Scale Computing Machines Symposium Proceedings, 3-5
 Aug., 1953
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 NCC, Pioneers Day, 1981-84
 IEEE, Computer Design Conference, VLSI in computers, Oct. 31-Nov. 3, 1983
 National Computer Conference, Pioneer Day, July 15-18, 1985
 Minutes & Agenda, 1985
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 Computer History, Margaret Butler, 1968-69
 Hughes, Edwin 1985

Robertson, J.E. articles, 1953, 1955-56, 1980, 1985
 Meagher, Ralph & Poppelbaum, W.J. paper, 1958
 Wheeler, David, 1985
 Pioneer Day, oral history tapes, 15-18 July 1985
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 9th Symposium on Computer Arithmetic, 6-8 Sept. 1989

Box 8:

COURSE MATERIAL, 1955-87

CS Qualifying Exam, 1969
 Preliminary and General Exams, 1976-82
 CS 294, Exam, 1969
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 Arithmetic Methods
 Error Analysis
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 Structure
 CS 337, Administration, (2 folders), 1979-86
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 Illiac I Sources, 1951-80
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 CS 364
 Theory of Decomposition of Structures....1975-76
 Problems, 1982-84
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 CS 377, 1977
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 384 lecture notes, Robertson (2 vols.)
 Logical Design of Automatic Computer Circuits, ca. 1950s

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M/EE 384 Lecture Notes, Poppelbaum
 CS 389, Problems & Exams, 1979
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 CS 393, Poppelbaum Lecture Notes
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 CS 397 Term Paper Topics (2 folders), 1972
 CS 464, 1982-84
 CS 481 Muroga Lecture Notes, 1967-68
 EE 497 B, 1964

RESEARCH PAPERS, PUBLICATIONS & REPORTS

Artificial Intelligence Lab, MIT, 1972

Artzy

Atkins

Atrubin

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Chen, T.C.

Chinal

Cowgill

Estrin

Fast Fourier Transformations

Freiman

Garner

Gillies

Goto

Gregory

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Stein

Strassen

Strugaru

Svoboda

Swartwout

Tung

Vineberg

Volder

Wallace

Winograd

Wilkes, Maurice; David Wheeler & Stanley Gill, The Preparation of Programs for an Electronic Digital Computer (Cambridge: Addison-Wesley Press, 1951).

Bureau of Standards, Western Automatic Computer, Aug. 1950

IRE proceedings, Computer issue, Oct. 1953

Computer Conference Proceedings, 1952-59

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Iliac II Development charts
 Computer Design plans
 Computer Science Building plans

Box 11:

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Notes on transistors, 1948

CSL (Control Systems Laboratory), 1948, 1953

Proceedings: Computation Seminar, sponsored by International Business Machines Corp.
 (IBM), Endicott, New York, Dec. 1949

Sigma Xi, 1949

Thesis, I. Correction Codes, and Application, ca. 1950

II., ca. 1950

IV. Discussion of Control Techniques, ca. 1950

V. Logical Design of Circuits and of Controls, 1949-50

Number Theoretical Aspects--Multi Error Corrections, ca. 1950

Outline/Introduction (for thesis?), 1950s

Rough Logical Designs, 1950s

Current Projects, 1950s

Notebooks of Equations, 1950s

Errors, Reliability, 1950s

Notes on Cable Drivers, 1950s

Internal and Progress Reports (2 folders), 1950-55

Control Circuits, 1950-51

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Paper: "Odd Binary Asynchronous Counters," 1951-58

Electronic Digital Computer Schematics, 1951

Princeton, 1951

Ordvac manual, 1951

Control Logical Drawings, 1951

Computer Control Design, 1951

Ordvac (General), 1951-53

Control for Arithmetic, 1951-53

Swedish Adder, 1951

U of I Adder and Digit Res., Sept. 1951

Robertson's Error Analysis, Nov. 23-27, 1951

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Core Memories, 1959

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Overflow Control Transfer, 1952

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DCL Minutes, 1952-57
 Computer Description, 1953-56
 DCL Technical Progress Report, April-December 1953
 Coding Manual, 1953
 Teletype: Printer and Perforation Doors, 1953-54
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 Computer Lab Policy, 1953-54

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 Drum Coating, 1953-54
 DCL Technical Progress Report, January-December 1954
ILLIAC Programming (DCL, 1954) with Robertson notes, 1954
 Multiplication, ca. 1954
 Division, ca. 1954
 SW Slowing Circuit, ca. 1954
 AC & DC Power Requirements G4 TKS, ca. 1954
 Gain Tolerance Tests, 1954
 Amplifier Calibration Curves, 1954
 Track Data, 1954-55
 Drum, Frequency Recordings/Brush Head-Saturation Curve, 1954
 Drum Codes, Shapin, 1954
 Results of Drum Test Codes, Shapin, 1954
 Drum Data, 1954-57
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 Use of Illiac, 1954, 1958-59
 Correspondence re: Illiac, 1955
 JONNIAC Programmer's Manual, 1955
 Drum, Digit Sensing and Correction, Circuits, Original Test Model Design, and Talks, 1955
 Photo Index, Pulse Tuning, ca. 1955
 Drum Playback Amplifier, Gain Curves and Data, 1955
 Drum and Head Checking Out, R.E. Miller, ca. 1955
 Drum and Head Tester Data, 1955
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 "Circuits Joe Built," 1955, 1999
 High Speed Computer Materials, 1955-56
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 Computer Handbook manuscript, 1955-57
 New Computer Design Studies, 1955
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 New Computer, Arithmetic, 1956-58

Cost and Time Estimates, ca. 1956
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 National Bureau of Standards, 1957
 Drum, AC & DC Power Requirements and Cooling Constants, 1957
 Wenta, Monthly Reports, 1957
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 Lectures on Arithmetic, University of Michigan (including manuscript of "Recent Developments in Asynchronous Circuit Design" by Robertson)
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 Shop, 1958
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 Digital computer article in Illinois Technograph, May 1958
 Illiac article in The Grid, December 1958
 Illiac II article in The Grid, January 1960
 Illiac Maintenance, 1959
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 "Cost Per Transistor Estimate" for "Slow Circuits 2," 1961
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 IBM, 1962
 "Partially Separable Functions" (dissertation, Thomas A. Slivinsky), 1967
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EE 120, Logical Design, Lecture Notes, ca. 1940s
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 Theory of Beam Power and Critical Distance Tubes, 1948
 EE 333 (?), lecture Notes, ca. 1940s
 EE 374, Communications Networks, ca. 1940s
 EE 463
 Frequency Modulation, 1947

RESEARCH PAPERS, PUBLICATIONS, & REPORTS, 1951-61

Avizienis
 Bar-Hillel
 Brown
 Carr
 Center of Research on Electronic Computers, University of Pisa
 Church

Forsythe
 Gill
 Hiller
 Householder
 Inose
 "Japanese Computers, Completed or Under Construction"
 Kaiser/Aitken
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COMPUTER LOGBOOKS AND MANUALS, 1949-97

Electronic Digital Computer Drawings, Ordvac, 1949-52
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 Ordvac Log, EDC Arithmetic Unit, March 9, 1950-April 21, 1951
 Ordvac Record Logbook, March 17, 1950-Sept. 17, 1951
 Ordvac Program Logbook, October 11, 1951-February 11, 1952
 Ordvac Record Logbook, December 5, 1951-October 11, 1952
 Ballistic Research Labs, Ordvac Manual, 1952
 Illiac Codes, Vol. V, L, ca. 1950s
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 Illiac IV Computing System Manuals (3 folders), 1970, 1997

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