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 Engineering
 Computer Science
 Wolfgang J. Poppelbaum Papers, 1955-1989

Box 1:

Correspondence, 1954-1989
 Chronological files, 1977-1989 (17 folders)
 Task 15, (Circuit Research Program), 1965
 University of Illinois, 1954-1991
 Biographical Materials
 Articles and Papers, 1950-1987 (2 folders)

Box 2:

Manuscripts, 1972, 1981
 Computer Hardware Theory, 1972
 Class Notes for CC 393 and CS 293
 Comments, 1969-1970
 Correspondence, 1970-1972
 Transparencies of Figures 1-1 through 12-25
 2nd. edition Proposal, 1973
 Stochastic and Determinants Averaging Processors, 1981
 Reports, 1954-1967
 Electrical Engineering Research Laboratory, 1954
 Digital Computer Laboratory, 1955-1963
 ATRIX (hybrid, analog, and digital graphical processing system (AEC Contract 1469 - Poppelbaum), 1967 (2 folders)

Box 3:

Reports, 1967-1989
 Department of Computer Science, 1967-1989 (5 folders)
 Subject Files
 American Federation of Information Processing Societies, Joint Computer Conference, 1967
 Advances in Computers Correspondence, 1974
 American Federation of Information Processing Societies. Joint Computer Conference, 1967
 Application of Laser Technology to Information Processing (Symposium), 1964-1965
 Atomic Energy Commission (Contract AT(11-1) - 1469) 1965-1966
 Bibliographies
 Braille Touchpanel, 1975
 Burst

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Advertising, 1974
 Ideas, 1974
 Capricious Grading Committee, 1974-1978
 Circuit Research Guidelines, 1966-1968
 College of Engineering Faculty Meetings, 1979-1980
 College Policy and Development Committee, 1982-1984
 COMCON '73 (Slides), 1974
 Committee on Educational Innovation, 1977
 Computer Graphics Conference, 1968-1969
 Department of Computer Science Proposals, 1965-1981
 Department of Computer Science Publicity Brochure, 1977
 Digital Computer Laboratory Building Committee, 1963-1965
 Eastern Joint Computer Conference (EJCC), 1959
 Educational Innovation Committee, 1980
 Educational Model Paper (Photographs), 1972
 Efficient Technical Education Presentation, 1975
 Electrical Engineering Faculty Notes, 1979-1980
 Electrical Engineering Graduate Committee, 1972-1981
 Electrolytic Transistors - Some Remarks, 1970
 Flip-Flops (circuits), 1956
 Flossie (display system), 1975
 Gaines and Poppelbaum - Probabilistic and Deterministic Averaging Processors, 1975
 General Exam - Hardware, 1980
 Graduate Students, 1984
 Graphics Conference News Article, ca. 1970
 Gravitational Communications, 1972
 G.T.E., 1973-1974

Box 4:

Subject Files

HAL Equipment, 1975
 Hardware Research Guidelines, 1972-1976 (4 folders)
 Hardware Subcommittee CS Course Revision, 1970-1982
 Hardware Syllabus, 1974
 Houghton Mifflin Co., 1971
 IEEE (Institute of Electrical and Electronics Engineers)
 Computer Elements Committee, 1967
 International Convention, 1967-1968
 Solid State Circuit Subcommittee, 1964-1981
 Illinois Group (Consulting Group including UIUC Senior Faculty), 1975
 Industrial Affiliates Programs, 1980
 Information Engineering Laboratory, 1974-1975
 Proposal, 1975
 Quarterly Technical Progress, 1974-1975

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International Conference on Information Processing, 1959
 Irwin, Arlyle, 1965-1968
 Kubitz, William Activities, 1981
 Lake Arrowhead Workshop Reprint, 1973
 Large Scale Biomedical Information System (NLM Grant), 1979-1984
 LASL (Los Alamos Scientific Laboratory), 1971-1977
 Organization Chart and Staff Photographs, 1971
 Research Plans, 1972
 Security, 1972, 1976, 1977
 Little Computer (INTELEC), 1979
 Long Range Planning Committee, 1976-1977
 Los Alamos
 Correspondence, 1972-1973
 Stochastic Work, 1974
 Medical Electronics Project, 1973-1974
 Cardalert, ca. 1973
 Correspondence, 1973-1974
 Micromobile, ca. 1973
 Poppelbaum's Contribution, ca. 1978
 Proposal, 1973
 Michalski, Ryszard - Papers, 1973, 1977-1978
 Moss, Randy, 1978
 MSB Theory (Simplified Modifier) - Plan
 National Science Foundation (NSF) Proposal: Pulse and Pulse-Train - Correspondence,
 1978
 New Courses, 1982
 "A Non-Weighted Binary Structure for Speech Applications" - Correspondence and
 Models for Paper, 1979
 Office of Naval Research (ONR) - Circuit Research Program (Contract No. Nonr-
 1834(15)), 1961-1963 (6 folders)

Box 5:

Subject Files

Office of Naval Research (ONR), 1955-1978
 Contracts and Correspondence, 1973-1978 (2 folders)
 Final Report (ILLIAC II and Uncommon Forms of Information Processing),
 1955-1973
 Philosophy of Computers, 1972-1973
 Proposals, 1974-1978 (3 folders)
 Statistical Processor Workshop, 1976
 Stochastic Processing Workshop, 1977
 Technical Reports, 1955-1956
 On-line Optical Data Processing System, ca. 1969
 On-line Recognition (OLREC), 1978, 1980

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Patents, 1953-1979
 Patents - Burst, 1974-1976
 Pattern Recognition Society, 1967-1974
 The Phastor (analog storage unit)
 Princeton - Correspondence, 1972
 Privacy Research, 1978-1979
 "Probable Trends in Computer Technology from 1965-1970," ca. 1966
 Proposal for a Five-year Hardware Research Program
 Proposed Naval Applications of Stochastic and Burst Processing, 1974
 Prospects (students), 1977-1978
 Robinson, Colan Michael, 1978
 Robotics, ca. 1972
 Seminar on Transistor, 1955
 Shop File, 1977
 Solid State Circuits Review Board (IEEE), 1974
 Space Committee, 1971, 1980
 "Statistical Processors" Reprint and Photographs, 1976
 Stochastic Computing, 1967-1974
 Students Abroad Office, 1973
 Task 15 Reports (Circuit Research Program), 1960
 Teaching Evaluations and Improvement Committee, 1976
 Transistor Data Tabulation, 1967
 Trip Reports, 1957-1966
 IEEE 4-10 Solid States Circuit Committee, 1965-1966
 Symposium on Large Capacity Memory Techniques for Computing Systems,

1961

 Western Joint Computer Conference, 1957-1958
 Votrax (Vocal Interface Synthesizer), 1975
 VLSI (Very Large-Scale Integrated Circuits), 1980
 Willis Ware, 1971-1972
 X - or Clock (Electronic Clock), 1964

ILLIAC (History 1952-1962)

ILLIAC I

Blueprints, 1956-1962 (2 folders)
 Design Techniques, 1955

Box 6:

ILLIAC I, 1954-1977

New Transistorized Computer Logical Diagrams and Circuits, 1960
 Trance: A Direct Couple, Asynchronous Computer-Model
 Using ..., ca. 1961
 Trace Circuits, 1956
 Transistor Circuits Built at the Digital Computer
 Laboratory ..., 1954-1955

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ILLIAC II, 1961-1964

Annual Report and Proposal (AEC Contract AT(11-1)-415), 1964

Circuit Design for the New Illinois Computer, 1959

Manual, 1963

Reports, 1961-1964

System Manual, 1964

ILLIAC III, 1969-1973

Dynamic Focusing and Pincushion Correction Circuit..., 1969

ILLIAC III Computer System Manual: Arithmetic Units - Volume 2, 1973

ILLIAC V - Proposal Ideas, 1977

Course-Related Materials, 1959-1985

Lecture Notes, Problems and Course Evaluations

CS 281 - Computer Hardware Theory, 1972, 1975, 1982-1985 (3 folders)

CS 293 - Introduction to Computer Hardware, 1973

CS 381 - Advance Computer Hardware Theory, 1972

CS 385 - Theory of Semiconductor Computer Devices, 1969

CS/EE 485 - Special Topics in Computer Hardware, 1973-1974

CS/EE 581 - Digital Circuits and Machines, 1977

D.C.S. 385 - Digital Computer Electronics, ca. 1959

E.E 393 - Digital Computer Electronics, ca. 1960 (2 folders)

E.E. 485 - Probabilistic and Deterministic Averaging Processors, 1976

Box 7:

Course-Related Materials, 1956-1985

Lecture Notes, Problems and Course Evaluations

Math 385 - Digital Computer, ca. 1960

Math and E.E. 294 - Introduction to the Theory of Digital Machines, ca. 1960

Math and E.E. 384 - Logical Design of Automatic Digital Circuits, 1956

Student Papers and Projects, 1969-1989

Department of Computer Science - Student-Guided Research Projects, 1969, 1972, 1975-1978

Student Papers, 1983-1984, 1988-1989

CS 281 - Introduction to Computer Circuits, 1985

CS 290, 1964

CS 293 - Introduction to Computer Hardware

Includes index descriptions and photographs for Experiments 1-1 through 14-8 (3 folders)

CS 381 - Computer Memories and I/O

General, 1981, 1988-89 (5 folders)

"Memory Presentation Series", 1985 (6 folders)

Includes index to papers

CS 485 - Special Topics in Computer Hardware, 1976

CS 490 - Student Papers, 1980

EE 296 - Student Papers, 1974

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Box 8:

Doctoral Degree Theses, 1963-1987

List of Theses

Ph.D. Theses Submitted to the Department of Computer Science under the Direction of Professor Poppelbaum, 1963-1987 (some under ONR contracts).

Box 9:

Master's Degree Theses, 1964-1989

List of Theses

Master's Theses Submitted to the Department of Computer Science under the Direction of Professor Poppelbaum, and under ONR contracts, 1964-1989.

Burst I (38-35mm slides), 1975-1976

Burst II (11-35mm slides), 1975-1976

Color Modulation - Spectrum Sample Transmission (28-35mm slides)

Negative Resistance Modulation (6 lantern slides)

Office of Naval Research - Presentation in Washington, 1978 (17-35mm slides)

Unifield (35-35mm slides)

Box 10

Proposals and Projects - Blueprints and Diagrams

Circuits, UNIVAC, ENIAC, Replica of Pascal's, Babbage's and Neumann's Machines, 1968 (2 folders of negatives)

Stochastic Meter, Burst, Logituner (12 containers of 35 mm slides)

Flow-gating Principle, Circuits, Opto-Electric Switching Matrix, Storage Systems

Monitor Optics and Transistors (10 containers of lantern slides)

Box 11:

Projects

Index

Overview of Projects

Project Diagrams (46 folders of transparencies and photographs)

Includes projects of various faculty including projects in which Poppelbaum was involved

"In Memoriam Memories, 1952-1973"

"30 Years of I.E.L.," 1988

Includes manuscript and photographs

Box 12:

Projects - Diagrams

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Biburst: Compressor/Encoder (transparencies)
 Bundle Processing (negatives)
 Burft: Processing (transparencies)
 Burst Processing (transparencies)
 Burstcomp: Processing (transparencies, negatives)
 Cardalert: Arrhythmia/Cardio Monitor (transparencies)
 Driad: Synchronous Sampling (transparencies)
 Ergodic, Sabuma, Transmatrix (transparencies, negatives)
 Flossie: Display System (negatives)
 Instrument Panels (transparencies, negatives)
 INTELEC, Pact Station
 Locoburst (transparencies)
 Longituner
 Marvel Report (transparencies)
 Micromobile
 OLEF: Bundle Multiplier (Stochastic)
 ONR Language Plans: Indicator Processing, Generalized Burst, 1976
 Optocomp: Optical Logic (transparencies)
 Pacemaker
 Rascel (transparencies), 1976
 Stereotronic, Hologram, Thermoplastic, Ardenne Tube, Projection CRT, Life Panel,
 Plasma Panel, Blast, Who Wants What in Displays, Volumatrix: Monitor
 (transparencies, negatives)
 Unipulse: Address System
 Walshstore: Storage (negatives)
 Weighted Binary: Averaging Systems (transparencies)
Far Out (16mm film) Film profiling research and development of display systems in the
 Department of Computer Science- ONR Contract NOOO 14-67-A-0305-007, 1969
 Contents
 First and Fourth Printings, 1969, 1973 (16mm film)
 Computer Hardware Theory – Diagrams, Chapters 1-5 (35mm slides)

Box 13:

Computer Hardware Theory – Diagrams, Chapters 6-14 (35mm slides)

Box 14:

Computer Hardware Theory - text book

Subject Files

Grant Proposals- To National Science Foundation,
 “Stochastic Processing and On-line coding for Communication”, 1973-1975
 “Correlation Modulation, Bandwidth Compression and Failsoft
 Computers, 1974-1975
 Grant Proposal -To Naval Research

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“The Control of Semi-Autonomous Robots Over Very Large Distances,
1978

Lecture Notes

“Introduction to the Theory of Digital Media”

Publications-Summary of Work/Information Engineering Library, 1974-1978

Letter from John Bardeen, June 2, 1954.

Box 15:

Photos

Illiac II

Photos used in production of *Computer Hardware Theory*