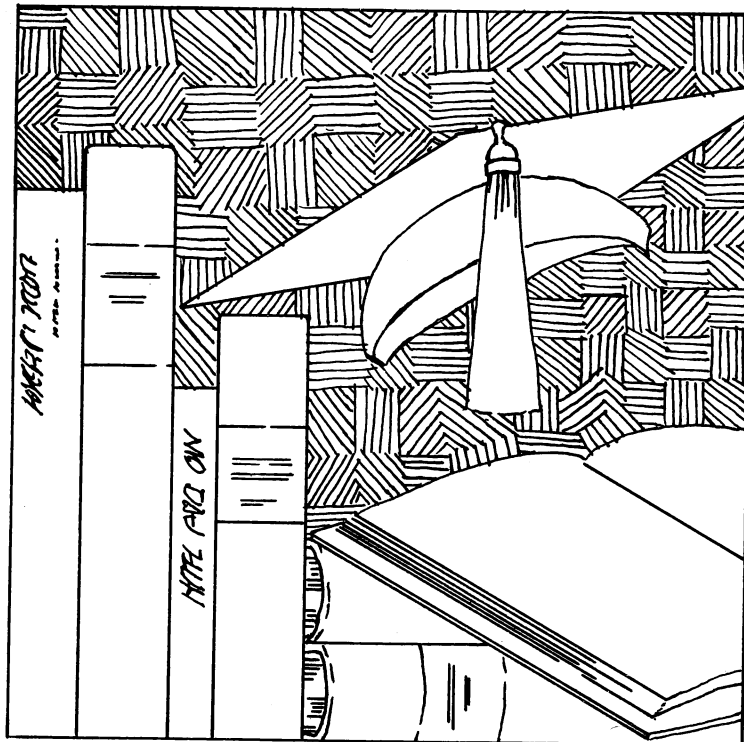


Our Faculty



PERSONNEL

Dr. Paul S. Fisher Head
Dr. William J. Hankley
Dr. Virgil E. Wallentine
Dr. Richard Sincovec
Dr. Myron A. Calhoun
Dr. Fred J. Maryanski
Dr. Linda G. Shapiro
Ms. Elizabeth Unger
Mr. Edwin W. Basham

RESUME

JULY 1975

NAME: Paul S. Fisher

ADDRESS: 3016 Conrow Drive
Manhattan, Kansas 66502

POSITION: Head/Associate Professor
Department of Computer Science
Kansas State University
Manhattan, Kansas 66506

TELEPHONE: Office (913) 532-6350 Home (913) 539-1202

EDUCATION: 1963 BA Math University of Utah
1964 MA Math University of Utah
1967 PhD Computer Science Arizona State University

PROFESSIONAL
EXPERIENCE:

1973 - present Kansas State University Head
1972 - present Kansas State University Assoc. Prof.
1972 Kansas State University Acting Head
1967-1972 Kansas State University Asst. Prof.
1969 - summer Boeing Co., Michoud Facility,
New Orleans, LA Research
1965 - 1967 Self-employed Custom
Programming, Phoenix, AZ

Present Computer Systems Command, US Army
Present Brooks Research, Kansas City, MO
1969 - present Synetics, Inc., Kansas City, MO
Systems Design and Implementation
1970 Menninger Foundation, Topeka, KS
Data Reduction System - Hardware Procurement
1969 - 1970 Consulting with several small regional colleges
with developing computer science programs.

APPOINTMENTS:

Reviewer for Computer Reviews ACM
Reviewer for CACM-Programming Systems Section
Reviewer for NSF Grants
Panelist: IEEE 74 Computer Conference - Mini Computer
Developments
Session Chairman:
Computer Science Conference
Ohio State, Columbus, Ohio
Participant: NSF-Regional Conference on Systems
University of Colorado, Boulder, Colorado

Structured Programming
University of New Mexico, Albuquerque, NM

High Level Languages
Indiana University, Bloomington, Indiana

Session Chairman:

Programming Language Implementation
on small computers. Sigplan Conference
Pedagogic Languages with small Computers,
University of Kansas, 1972.

Director

NSF Regional Conference 'Translators and
Translator Writing Systems', 1968

Lecturer:

One-week course in Programming Languages
for High School, Jr. College Teachers
Central State University, Oklahoma

NSF Regional Conference Awarded 9/1/70

Large System Scheduler and Performance Monitor System

Awarded 1/1/73 Department of Army

Language Assertion and Hint Processing - in preparation

TEACHING
EXPERIENCE:

<u>Level</u>	<u>Course</u>
Advanced Graduate	Cellular Computation
"	Compiler Implementation
"	Programming Languages
"	Artificial Intelligence Techniques
Graduate	Systems Programming
"	Business Systems Analysis
"	Automata Theory
"	List and String Processing
"	Data Structures
"	Logic Design
"	Formal Semantics
Undergraduate	Assembly Language
"	Programming Languages (both specific & general)
"	Non-numeric Programming

HONORARY
PROFESSIONAL
SOCIETIES:

Association of Computing Machinery

RESEARCH FIELDS:

Artificial Intelligence (dormant)
Language Implementation (active)
Aids for System Development (active)

Primary Teaching Interests:

Artificial Intelligence, Languages and Language
Implementation, Systems (both Data Processing
techniques as well as the usual operating systems.)

PERSONAL DATA: Date of birth: March 7, 1942
 Marital Status: Married
 Family: 3 sons, 2 daughters
 Hobbies: Antique Cars
 Citizenship: USA

PUBLICATIONS:

- Fisher, Paul S., "A Mini Operating System," ACM-SIGPLAN Symposium, Pedagogic Languages with Small Computer, January 6-7, 1972.
- McDonough, V., Paul S. Fisher, R. Weinberg, "Use of Computer Simulation for Designing a Dual-Processing, Time-Sharing, Mini-Computer System", ACM-SIGPLAN Symposium, Pedagogic Languages with Small Computers, Manuary 6-7, 1972.
- Ahmed, N., Paul S. Fisher, "Study of Algorithmic Properties of Chebyshev Coefficients," International Journal of Computer Mathematics, Vol. 2, 1970, pp. 307-317.
- Ahmed, N., Paul S. Fisher, R. R. Rao, "On a Criteria for Data Compression, and Binary Fourier Representation," presented Midwest Symposium on Circuit Theory, May 7-8, 1970.
- Fisher, Paul S., E. E. Kohlbecker, "A Generalized Fibonacci Sequence," Fibonacci Quarterly, Vol, 10, 1972, pp. 337-344.
- Skidmore, E. L., Paul S. Fisher N. P. Woodruff, "Wind Erosion Equation: Computer Solution and Application," Soil Science Society of America Proceedings, Vol. 34, No. 5, November-December 1975.
- Fisher, Paul S., Hankley, William J., Wallentine, Virgil E., "Separation of Introductory Programming and Language Instruction," 4th ACM-SIGCSE Annual Conference, February 1973.
- Cassing, D., Fisher, P., Janes, R., "A Software Virtual Memory System for a Mini-Computer", Second Annual Computer Conference, Austin, Texas.
- Fisher, P., "Virtual Memory: A New Horizon For Mini Computers" 9th IEEE Computer Society International Conference, Washington, D.C., Sept. 1974.
- Hankley, W., Fisher, P., "A Vertical Assertion Facility", Third Annual Computer Conference, Austin, Texas, Nov. 1974.

RESUME

July 1975

NAME: William J. Hankley

ADDRESS: 3000 Sunnyside Dr.
Manhattan, KS 66502

POSITION: Associate Professor
Department of Computer Science
Kansas State University
Manhattan, Kansas 66506

TELEPHONE: Office (913)532-6350 Home (913)539-2731

EDUCATION: 1962 BS Electrical Engineering
Northwestern University
1964 MS EE (Information Science)
Northwestern University
1967 PHD EE (Computer Science)
Ohio State University

PROFESSIONAL:
EXPERIENCE:

Employment

1972 - Present	Current Position
1967 - 1972	Asst. Prof of Computer Science & EE University of Utah
1965 - 1967	Research Assistant Ohio State University
1964 - 1967	Instructor, Ohio State University
1962 - 1964	Teaching Assistant Northwestern University
1964	Research Engineer North American Rockwell
1963	Research Engr., Boeing Co.
1962	Research Engineer, IBM Lexington, Ky
1961	Research Assistant, Square D, Co.

HONORARY
PROFESSIONAL
SOCIETIES:

Associate for Computing Machinery (SIGPLAN, SIGCSE,
SIGGRAPH)
IEEE (Computer Society)
Pi Mu Epsilon
Sigma Xi

RESEARCH

FIELDS: Software Engineering (Portability and correctness, assertion refinement)
Programming Languages (interpreters, easy-to-use very high level language)
Interactive Graphics

PERSONAL: Date of Birth: May 31, 1942
Marital Status: Married Wally Lense
Family: 3 children
Citizenship: United States

PUBLICATIONS:

- W.J. Hankley, "Time-Optimal Control of Discrete Systems Subject to Input Saturation," Technical Report No. 10, Computer Sciences Laboratory, Northwestern University, 1964.
- W.J. Hankely and J.T. Tou, "Note on Control of Multiple Input Discrete Systems," IEEE Transactions on Automatic Control (correspondence), Vol. AC-12, No. 4, August, 1967, pp. 469-470.
- W.J. Hankley and J.T. Tou, "Automatic Fingerprint Interpretation and Classification via Contextual Analysis and Topological Coding," in Pictorial Pattern Recognition, Thompson Book Company, Washington, D.D., 1968, pp. 411-456.
- W.J. Hankley, "Fingerprint Classification for Automated Processing," Proceedings, Carnahan Conference on Electronic Crime Countermeasures, University of Kentucky, 1968, pp. 70-82. Also presented 1968 Western Electronics Convention, WESCON Booklet 18, Los Angeles, California, August, 1968.
- H.M. Merrill and W.J. Hankley, "N10 Failure Diagnosis Using Pattern Recognition," Technical Report SRL-68-6, Systems Research Laboratory, University of Utah, August, 1968.
- W.J. Hankley and H.M. Merrill, "A Pattern Recognition Technique for System Error Analysis," IEEE Transactions on Reliability, special issue on Computer Aided Design and Analysis for Reliability and Maintainability, Vol. R20, #3, August, 1971, pp. 148-153.
- P.C. Abegglen, W.R. Faris, and W.J. Hankley, "Design of a Real-Time Central Data Acquisition and Analysis System," Proceedings of the IEEE, Vol. 58, No. 1, January, 1970, pp. 38-48, special issue on Computers in Industrial Process Control. Reprinted in J. Schoeffler and R. Temple (Eds), Minicomputers: Hardware, Software, and Applications, IEEE Press, New York, 1972.
- F.E. Templeton and W.J. Hankley, "Optimal Control of a Process with Discrete and Continuous Decision Variables," Technical Report, Computer Science, University of Utah, September, 1970. A preliminary version of this work appears as "Dynamic Optimal Control of a Process with Discrete

and Continuous Decision Variables," in Techniques for Decision Making in the Mineral Industry (Proceedings 1970 International Symposium), Canadian Institute of Mining and Metallurgy, Montreal 110, Quebec, 1971.

T.A. Carey and W.J. Hankley, "Empirical Modeling of Occurrence of Severe Weather Events," Technical Report, Computer Science, University of Utah, January, 1972. Also, in Proceedings Conference on Environmental Engineering, Society of Engineering Science, Washington, D.C., 1971, pp. 83-108.

W.J. Hankley and N.J. Miller, "Characterization of Pulse Waveforms for Classification," (Abstract) Conference Record, IEEE Symposium on Feature Extraction and Selection, IEEE, New York, N.Y., 1970.

W.J. Hankley, "Source-Environment Models for SO₂ Concentration," Internal Document, Scientific and Engineering Computer Center, Kennecot Copper Corporation, 1971.

P. Fisher, W. Hankley, V. Wallentine, "Separation of Introductory Programming and Language Instruction," SIGCSE Bulletin, Vol. 5, #1, Feb., 1973.

W. Hankley, V. Wallentine, "Programming Language Design for a Spectrum of Users," 7th Annual Conference on the Interface of Computer Science and Statistics, Iowa State University, October, 1973.

W. Hankley, P. Fisher, "Top Down Refinement of Assertions," Third Texas Conference on Computing Systems, Nov., 1974.

W. Hankley, "Anatomy of Programming Languages," CS 405 Class Notes, In Preparation.

P. Fisher, W. Hankley, J. McCull, "Steps Towards Reliable Software," (Workshop Proceedings), US Army Computer Systems Command, March 1975 (also KSU Technical Report (S-75-01)).

J. Carrow, P. Fisher, W. Hankley, I. McCall, "Structured Programming Workbook", (Workshop Proceedings), US Army Computer Systems Command, June 1975 (also KSU Technical Report 75-01).

A. Gonen, I. Sagie, W. Hankley, "EPS II Macroprocessor Applications to Software Systems", US Army Computer Systems Command, August 1975 (also KSU Technical Report (CS-75-04)).

RESEARCH

FIELD: Operating Systems
Programming Languages
Computer Networks
Software Engineering

PERSONAL

DATA: Date of Birth - April 16, 1943
Marital Status - Married
Family - two children
Citizenship - U.S.
Security Clearance -

PUBLICATIONS:

Papers:

(with J.H. Campbell and C.T. Wright). A pedagogical operating system. ACM SIGPLAN Symposium on Pedagogic Languages with Small Computers, January, 1972.

(with P.S. Fisher and W.J. Hankley). Separation of introductory programming and language instruction. Proceedings of ACM SIGCSE Annual Conference, February, 1973.

(with F.R. Keller). Operating Systems in the Process Control Environment. Proceedings of Second Texas Conference on Computing Systems, Austin, Texas. November, 1973.

(with W.J. Hankley). Design of a Spectrum of User - Oriented Languages. Proceedings of Seventh Annual Conference on the Interface of Computer Science and Statistics, Ames, Iowa, October, 1973.

Technical Reports:

A pre-scan processor for Task. (Iowa State University), U.S. Atomic Energy Commission Report IS-2361, UC-32, September, 1970.

(with C.T. Wright and F.R. Keller). An abstract machine to control the execution of semi-independent concurrent computations. (Iowa State University), U.S. Atomic Energy Commission Report IS-2920, August, 1972.

A critical survey of time-sharing system analysis techniques. (internal report). Ames Laboratory, U.S. Atomic Energy Commission, May, 1969.

(with N. Waddington). Directory control in a segmented address space. (internal report). Ames Laboratory, U.S. Atomic Energy Commission, May, 1971.

(with T.H. Dana). Process address space control in a virtual memory. (internal report). Ames Laboratory, U.S. Atomic Energy Commission, May, 1971.

(with D. VanArkel). Hierarchy control in a segmented address space. (internal report). Ames Laboratory, U.S. Atomic Energy Commission, May, 1971.

Relevant concepts in the design of multiaccess computer systems. (internal report). Ames Laboratory, U.S. Atomic Energy Commission, January, 1971.

NODE - A package of Fortran subroutines to solve ordinary differential equations. I.S.U. Computation Center Program Library, Iowa State University, Ames, Iowa, 1965.

Text Material:

(with A.E. Oldehoeft). Principles of Operating Systems. Department of Computer Science, Iowa State University, 1972. (In preparation as a textbook).