VITAE

NAME: Nasir Ahmed   YEAR BORN: 1940

RANK: Associate Professor

DEPARTMENTS: Electrical Engineering
                    Computer Science

DEGREES: B.S., University College of Engineering,
                         Bangalore, India, 1961
                    M.S., University of New Mexico, 1963
                    Ph.D. University of New Mexico, 1966

EXPERIENCE: Research Assistant, University of New Mexico, 1961-63
                    Instructor, University of New Mexico, 1963-66
                    Principal Research Engineer, Honeywell, Inc., 1966-68
                    Research Specialist, The Boeing Co., Summer 1968

HONORARY AND PROFESSIONAL SOCIETIES:

        Institute of Electrical and Electronics Engineers
        Sigma Xi

FIELDS OF RESEARCH COMPETENCE:

        Scientific Data Processing Techniques, Pattern Classification,
        Communication Theory, Information Theory, Network Theory.

AWARDS: National Research Council travel grant to attend the 1971
                    IFIP (International Federation on Information Processing)
                    Congress, held in Ljubljana, Yugoslavia.

PUBLICATIONS:
(1) Related to Scientific Data Processing Techniques:

N. Ahmed and P.S. Fisher, "Study of Algorithmic Properties of Chebyshev
   Polynomials", Int. Journal of Computer Math., Dec. 1970, pp 307-317

N. Ahmed and K.R. Rao, "Discrete Fourier and Hadamard Transforms,"
   Electronics Letters, Vol. 6, No. 7, April 2, 1970, pp. 221-224.

N. Ahmed et.al., "BIFORE or Hadamard Transform," IEEE Trans. on Audio and
   Electroacoustics, Sept. 1971, pp. 125-135.

N. Ahmed and K.R. Rao, "Spectral Analysis of Linear Time-Invariant Systems
   Using BIFORE (Binary Fourier Representation)," Electronics Letters, Vol. 6,
   No. 2, 22nd Jan. 1970, pp. 43-44.

N. Ahmed, et al., "Multi-dimensional Binary Fourier Representation,"
   Proc. Second Southeastern Symposium on System Theory, March 1970,
   pp. J3-0 to J3-10.

NAME: Richard Kemp Brewer   **YEAR BORN:** 1937

RANK: Assistant Professor of Computer Science

DEGREES:

B.S. University of Wisconsin, 1959
M.S. University of Wisconsin, 1964

EXPERIENCE:

Sales trainee, American Hospital Supply Corp., 1959-1960
Technical editor and writer, AC Spark Plug Division,
General Motors (Titan Missile Division), 1960-1961
Director of Public Information, University of Wisconsin
Medical Center (medical writing, publications and public relations), 1962-1963.
Research Assistant, University of Wisconsin, Mass Communications Research Center, 1963-1966.
Project Assistant, University of Wisconsin, Department of English, 1965-1966.
Fellow, National Science Foundation, The RAND Corp., Santa Monica, California, 1966-1967.
Instructor, University of North Carolina at Chapel Hill, joint appointment with School of Journalism and Dept. of Computer and Information Science, 1967-1969.
Research Associate, Carolina Population Center, U. of North Carolina at Chapel Hill, 1969-1970.
Assistant Professor, Kansas State University, 1970-present.

PROFESSIONAL RECOGNITION AND HONORS:

National Science Foundation Fellowship in Computational
Linguistics, 1966-1967.

HONORARY AND PROFESSIONAL SOCIETIES:

Association for Computing Machinery

FIELDS OF RESEARCH COMPETENCE:

Computational linguistics, information retrieval,
psycholinguistics, experimental design, computational
stylistics.

PROFESSIONAL PUBLICATIONS:

"Consistency of Syntatic Structure as a Factor in
Journalistic Style," with P. H. Tannenbaum.
Journalism Quarterly, 42, 273, 1965.

<u>RESUME</u> of Myron Ammon Calhoun

604 Bertrand Street
Manhattan, KS   66502
(913) 776-7590

Areas of Demonstrated Competence:

Hardware design and implementation of digital systems ranging
from dedicated-application, non-programmable processors through
both small- and large-scale general-purpose, programmable
computers.

Programming of computer system software, Management Information
Systems, and user-oriented application programs on various
computers, including test-and-control languages for debugging
new computer hardware interfaced to existing equipment.

Other Areas of Interest:

Smoothing of Hardware-Firmware-Software-Programming boundaries
Computer-aided design of digital systems
Machine-independent software and/or languages

Personal Data:

Born January 31, 1941, in Niles, Michigan
Male, married, three children
Selective Service Classification: III-A
Social Security Number: 265-56-8539
"Q" clearance (VG 13795) granted August, 1966
Hobbies: beekeeping, amateur radio (W4WKV), fishing

Education:

Ph.D. 1967   Arizona State University, Tempe, Arizona
M.S. 1964   Colorado State University, Ft. Collins, Colorado
B.S. 1963   University of Kansas, Lawrence, Kansas
A.A. 1961   Graceland College, Lamoni, Iowa

Awards, Scholarships, Honor Societies:

NASA Traineeship, Arizona State University (1964-67)
NSF Graduate Fellowship, Colorado State University (1963-64)
Graduated "With Highest Distinction" from University of Kansas
RCA Scholarship, University of Kansas (1962-63)
BOEING Scholarship, University of Kansas (1961-62)
GOLD SEAL for Scholarship (one of three), Graceland College
National Merit Finalist (1959)
Valedictorian, Milton High School, Milton, Florida (1959)
Member of Tau Beta Pi

NAME: Kenneth Conrow   **YEAR BORN:** 1933

TITLE: Associate Professor of Computer Science

DEGREES:
B.A.   Swarthmore College, 1954
Ph.D.   University of Illinois, 1957

EXPERIENCE: Assistant Professor, University of California, 1957-61
Assistant Professor, Kansas State University, 1961-65
Associate Professor, Kansas State University, 1965-date

HONORARY AND PROFESSIONAL SOCIETIES:

American Chemical Society
Alpha Chi Sigma
Sigma Xi
Phi Beta Kappa
Phi Lambda Upsilon

FIELDS OF RESEARCH COMPETENCE:

Alicyclic compounds, non-benzenoid aromatics, physical-organic chemistry, applications of nmr to organic problems, computer generation of organic nomenclature

RELEVANT PROFESSIONAL PUBLICATIONS AND PAPERS:

"Machine Computation of Association Constants from Spectrophotometric Data: An Analysis of Errors," J. Am. Chem. Soc., 86, 1025 (1964).

"Computer Generation of Baeyer System Names of Saturated Bridged Bicyclic, Tricyclic and Tetracyclic Hydrocarbons," J. Chem. Documentation, 6, 206 (1966).

"NEATER: A PL/I Source Statement Reformatter," No. 360D-03-6.018, Contributed Program Library, IBM, 40 Saw Mill River Road, Hawthorn, New York 10532.

"NEATER 2: A PL/I Source Statement Reformatter," accepted by Communications of the ACM.

Professor Conrow has 16 other published scientific papers in refereed journals in the field of chemistry plus a book: DEDUCTIVE ORGANIC CHEMISTRY: A SHORT COURSE, published by Addison-Wesley (1966).

NAME: Paul S. Fisher   YEAR BORN: 1942

TITLE: Assistant Professor of Computer Science

DEGREES: B.A.   University of Utah, 1963
                  M.S.   University of Utah, 1964
                  Ph.D. Arizona State University, 1969

EXPERIENCE: Instructor, University of Utah, 1964-65
              Manager of Operations, Arizona State University, 1965-66
              Computer Consultant, Arizona State University, 1965-67
              Assistant Professor, Kansas State University, 1967- date
              Consultant, Boeing Co., Summers of 1968 and 1969
              Director, Conference on Translator and Translator Writing
                Systems, KSU, Department of Computer Science, January
                4-8, 1971.
              Consultant, Boeing Aerospace, Summers 1968 and 1969,
                Michoud Facility, New Orleans, La.
              Consultant, Synectics Corporation, Kansas City, Missouri,
                June, 1970-present

HONORARY AND PROFESSIONAL SOCIETIES:

        Association of Computing Machinery

FIELDS OF RESEARCH COMPETENCE:

        Automata Theory, Programming Languages

PROFESSIONAL PUBLICATIONS:

        "Study of Algorithmic Properties of Chebyshev Coefficients,"
        Int. Journal of Comp. Math., 2 (4), 1970 (with N. Ahmed).

        "BIFORE (Binary FOurier REpresentation) Phase Spectrum,"
        Midwest Symposium on Circuit Theory, May 7-8, 1970 (with
        R. K. Rao, and N. Ahmed).

        "Wind Erosion Equation: Computer Solution and Application,"
        accepted for publication 1970, Soil Science Society of
        America Proceedings (with E. Skidmore).

        "WEROS: A FORTRAN IV Program to Solve the Wind Erosion
        Equation," to be published as USDA-ARS-41-174 (with E.
        Skidmore).

NAME: Tom L. Gallagher   **YEAR BORN:** 1932

RANK: Associate Professor, Department of Computer Science
Director, Computing Center

DEGREES: B.A., North Texas State College, 1953
M.S., North Texas State College, 1954
D.Sc., Washington University, 1967

EXPERIENCE: School of Nuclear Science and Engineering, Second Session,
Argonne National Laboratory, Lemont, Illinois, 1955
Senior Nuclear Engineer, Convair, Fort Worth, 1954-57
Nuclear Physicist, Babcock and Wilcox, Lynchburg, Va.,
1957-59
Reactor Physicist, Internuclear Company, Clayton, Mo.,
1959-62
Manager, Project Services, Computation Center, Washington
University, 1962-63
Director, Computation Center, Washington University
1963-65
Research Associate, Biomedical Computer Laboratory,
Washington University, 1965-67
Associate Director, Computing Facilities, Washington
University, 1967-69
Assistant Professor of Computer Science, School of
Engineering and School of Medicine, 1967-70
Director, Computing Facilities, Washington University,
1969-70
Director, Computing Center, Kansas State University,
1970 -
Associate Professor, Department of Computer Science,
Kansas State University, 1970 -

PROFESSIONAL RECOGNITION AND HONORS:

Who's Who at North Texas, Physics, 1953
Association of Computing Machinery, Saint Louis Chapter,
Secretary Treasurer, 1969-1970

HONORARY AND PROFESSIONAL SOCIETIES:

America Management Association
Association of Computing Machinery

FIELDS OF RESEARCH COMPETENCE:

Mathematical Programming, Optimization Techniques,
Information Storage and Retrieval, Management
Information Systems, Biomedical Data Processing

NAME: Michael H. Miller

                                                     YEAR BORN: 1934

RANK: Assistant Professor of Computer Science
Assistant Director of Computing Center

DEGREES: B.S., Iowa State, 1958
M.S., Iowa State, 1961

DEPARTMENT: Computing Center

EXPERIENCE: U.S. Army, 1954-56
Graduate Assistant, Iowa State Univ., 1958-60
Instructor, Kansas State Univ., 1960-65
Manager of Systems and Operations, Computing Center
    Kansas State Univ., 1960-65
Consultant to Agri. Division Dunlap & Associates, Inc.
    Manhattan, Kansas, 1960-68
Assistant Professor, Mathematics, Kansas State
    Univ. 1965-1970
Assistant Director, Computing Center, Kansas
    State Univ. 1965 to present
Assistant Professor, Computer Science, 1970
    to present

HONORARY AND PROFESSIONAL SOCIETIES:

     Pi Mu Epsilon

FIELDS OF RESEARCH COMPETENCE:

     Computer Operating Systems
Programming Languages

NAME: Harold Sackman

YEAR BORN: 1927

RANK: Professor of Computer Science

DEGREES:
B.S. City College of New York, 1948
M.A. Columbia University, 1949
Ph.D. Fordhom University, 1953

EXPERIENCE:
Research Associate, Fordhom University, 1951-52
Research Associate, Psychological Research Associates, Washington, D.C. 1952-53
Social Scientist, RAND Corporation, 1953-57
Senior Research Leader, System Development Corporation, 1957-70
Lecturer, Director of Short Courses, UCLA, 1968-71
Senior Research Leader, Univ. of Southern California, 1970-71

HONORARY AND PROFESSIONAL SOCIETIES:

American Psychological Association
American Association for the Advancement of Science
Association for Computing Machinery
Phi Beta Kappa
AFIPS (American Federation of Information Processing Societies) Chairman, Committee on Social Implications of Computers

PROFESSIONAL PUBLICATIONS:

NAME: R. F. Sincovec

YEAR BORN: 1942

TITLE: Assistant Professor of Computer Science

DEGREES:

B.S. Applied Mathematics, University of Colorado, 1964
M.S. Applied Mathematics, Iowa State University, 1967
Ph.D. Applied Mathematics, Iowa State University, 1968

EXPERIENCE:

University of Colorado Computing Center, Boulder, Colorado
NSF Research Grant - Summer 1962.

E. I. du Pont de Nemours & Co., Chattanooga, Tennessee -
Process and quality control - Summers, 1963, 1964, 1965.

Iowa State University, Ames, Iowa - Graduate teaching asst.
and instructor in mathematics - School year 1964-65 and 1968-68.

Ames Laboratory, Ames, Iowa - Graduate research assistant
and Junior Mathematician - 1966 - 1968.

Esso Production Research Co., Houston, Texas - Senior
research mathematician - 1968 to date.

HONORARY AND PROFESSIONAL SOCIETIES:

Sigma Tau
Phi Theta Kappa
S.I.A.M.
A.C.M.

PROFESSIONAL PUBLICATIONS:

"Cubic Spline Functions." Research Report, Esso Production
Research Company. 1969.

"1D-2∅ Incompressible Reservoir Simulation." Research Report,
Esso Production Research Company. 1969.

"Devivation of Matrix Equations for Reservoir Simulation by
Galerkin's Method." Research Report, Esso Production Research
Company. 1969.

"Spline Function Collocation Methods" (with E. Lee). Research
Report, Esso Production Research Company. 1969.

"Precision Calculation of Eigenvectors by Norm Reduction,"
submitted to S.I.A.M. (with R. J. Lambert). 1970.

"Development of a 1D-2∅ Incompressible Reservoir Simulation by
a Total Galerkin-Spline Technique." Research Report, Esso
Production Research Company. 1970.

NAME: Thomas N. Trump YEAR BORN: 1943

RANK: Assistant Professor of Computer Science

DEGREES:
A.B. Rice University, 1964 (Mathematics)
M.S. Purdue University, 1966 (Computer Science)
Ph.D. Purdue University (Expected 1971)

EXPERIENCE:
Engineering Assistant, Federal Communications Commission,
Summers 1961-1963
Mathematician, National Bureau of Standards, Summers,
1964-1965
Graduate Teaching Assistant, Purdue University, 1965-
1967 (Computer Science)
Graduate Teaching Assistant and Instructor, University
of Colorado, 1967-1970 (Mathematics and Computer Science)
Assistant Professor of Computer Science, Kansas State
University, August 1970-present

PROFESSIONAL RECOGNITION AND HONORS:

NIH Biomathematics Fellowship 1965-1966
NASA Traineeship 1967-1968

HONORARY AND PROFESSIONAL SOCIETIES:

Association for Computing Machinery
National Association for the Advancement of Science

FIELDS OF RESEARCH COMPETENCE:

Systems Programming
Numerical Analysis

NAME: Elizabeth A. Unger   YEAR BORN: 1939

RANK: Assistant Professor, Computer Science
               Associate Director, Computing Center

DEGREES: B.S., Michigan State University, 1961
           M.S., Michigan State University, 1963

EXPERIENCE: Laboratory Assistant, Michigan State University, 1957-59
           Applied Science Student Trainee, IBM, Lansing, Michigan, 1961-62
           Graduate Assistant, Michigan State University, September 1961 –
             March 1963
           User Services Supervisor and Librarian, Michigan State University, 1963-66
             sity, 1963-66
           Instructor, Kansas State University, 1966-69
         Assistant Professor, Kansas State University, September 1969
        to present
           Chief Programmer, Kansas State University Computing Center,
          1966-67
           Assistant Director, Kansas State University Computing Center,
             1967-69
           Associate Director, Kansas State University Computing Center,
             (January through July) 1969
           Acting Director, Kansas State University Computing Center,
             1969-70
           Associate Director, Kansas State University Computing Center,
             1970 –

PROFESSIONAL RECOGNITION AND HONORS:

        Distinguished Alumni Award, Michigan State University, June, 1970

HONORARY AND PROFESSIONAL SOCIETIES:

        American Society for Mechanical Engineers
        Association for Computing Machinery
        Tau Beta Pi
        Phi Kappa Phi
        Pi Tau Sigma
        Pi Mu Epsilon
        Mortar Board

FIELDS OF RESEARCH COMPETENCE:

        Computer Programming Languages
        Information Retrieval Systems for Behavorial Sciences

NAME: Roger Weinberg   **YEAR BORN:** 1931

TITLE: Associate Professor of Computer Science

DEGREES:

B.S. Tulane University, 1951
M.A. University of Texas, 1952
Ph.D. University of Texas, 1954
M.S. University of Michigan, 1969
Ph.D. University of Michigan, 1970

EXPERIENCE:

Research in Bacterial Genetics, Fort Detrick, 1954-56, (with Werner Braun).

Instructor, Assistant Professor, University of Pittsburgh, 1958-65

Consultant, Western Electric Corp., Pittsburgh, 1964-65

Special Postdoctoral Fellow with J. A. Jacquez, University of Michigan, 1965-68

Research Associate, Logic of Computers Group, Department of Communication Sciences, University of Michigan, 1968-70.

Associate Professor of Computer Science, Kansas State University, 1970-present.

HONORARY AND PROFESSIONAL SOCIETIES:

Phi Beta Kappa
Sigma Xi
Genetics Society of America
American Society of Microbiology
AAAS
N. Y. Acad. of Science
Who's Who in Mid-west America
American Men of Science
Simulation Councils Inc.
Association for Computing Machinery

FIELDS OF RESEARCH:

Computer Simulation, Eco-Systems