

Authors

Wei Chang

Data Processing Division, White Plains, New York

Dr. Chang is a senior engineer in the system design aids development group located in White Plains and Poughkeepsie and is currently working on new system design techniques to assist IBM systems engineers. Since joining IBM in 1959 he developed a performance simulation program to assist the design of the airline reservation system in 1961 and designed and managed the development of a communications network design program and a teleprocessing systems design program in 1964. He has also worked on performance analysis of data based systems, reliable computer system design, and advanced communications systems. He received a B.S.E.E. from the National Taiwan University in 1957, a Professional Electrical Engineering degree from Columbia University in 1962, and a Ph.D. in systems science (electrical engineering) from the Polytechnic Institute of Brooklyn in 1969. Dr. Chang received an IBM Outstanding Contribution Award for his work on the network design program in 1965. He is a Fellow of the American Association for the Advancement of Science and a member of the Institute of Electrical and Electronics Engineers, the Association for Computing Machinery, and the Operations Research Society of America.

Michel F. Choquet

Centre d'Etudes et Recherches, La Gaude, France

Mr. Choquet is currently manager of transmission technology in the Advanced Technology Department at the La Gaude laboratory where he is engaged in the development of modem designs. Prior to his present assignment he was manager of pulse code modulation technology from 1970 to 1973. Mr. Choquet joined IBM in 1968 at the Development Engineering Center in La Gaude, where he worked on modem designs. He received an engineering degree from the Ecole Supérieure d'Electricité, Paris, in 1962 and was employed by the Compagnie Francaise Thomson Houston-Hotchkiss-Brandt in Gennevilliers from 1964 to 1967.

Jan Gecsei

University of Montreal, Montreal, Canada

Dr. Gecsei has been an Associate Professor at the University of Montreal since May 1974. While associated with IBM from 1967 to 1974, he was assigned to the System Development Division in San Jose, where he worked on new methods for the evaluation of storage devices and the architecture of storage systems. He later joined IBM Canada as an advisory systems engineer on a project to design and evaluate a large interactive banking system for the Bank of Montreal. He was a Visiting Professor of Electrical Engineering at McGill University in Montreal from 1971 to 1972. He has also held several positions as a development engineer with firms in Czechoslovakia, Israel,

and the United States. His education includes an M.S.E.E. degree from the Czech Technical University in Prague in 1958 and a Ph.D. in Control from the Czech Academy of Science in 1964. Dr. Gecsei received an IBM Outstanding Contribution Award in 1969 for use of relative frequencies for the evaluation of storage hierarchies and an award from the Association for Computing Machinery for the best paper on computers in 1970.

Maurice Hanan

Research Division, Yorktown Heights, New York

Dr. Hanan is a member of the circuits and computer design automation group at the Thomas J. Watson Research Center. He is currently involved in the development of mathematical and heuristic algorithms to solve problems arising in the area of design automation of digital computers. He joined IBM in 1960 as a staff mathematician in the Advanced Systems Development Division in Mohansic, New York, working in the area of error detecting and correcting codes. He previously was an instructor in mathematics at the Carnegie-Mellon University from 1957 to 1960 and, while on leaves-of-absence from IBM, was an Assistant Professor of Engineering Science and an Associate Professor of Mathematics at Pratt Institute in Brooklyn, New York, in 1962 and 1966. He received a B.S. in applied mathematics in 1955 from the Polytechnic Institute of Brooklyn, and an M.S. in 1958 and a Ph.D. in 1960, both in mathematics from the Carnegie-Mellon University. Dr. Hanan is a member of the American Mathematical Society, the Society of Industrial and Applied Mathematics, Sigma Xi, and Pi Mu Epsilon.

Toyohisa Kaneko

Research Division, Yorktown Heights, New York

Dr. Kaneko joined IBM in 1970 at the Thomas J. Watson Research Center and has worked on image processing, digital signal processing, and storage hierarchy. He is currently a member of the medical information processing group and is involved with ultra-sound imaging. From 1964 to 1967 he worked for the Matsushita Research Institute of Tokyo, where he was engaged in pattern recognition research. He received B.E., M.E. and Ph.D. degrees in electrical engineering from the University of Tokyo in 1962 and 1964 and Princeton University in 1970. He is a member of the Institute of Electrical and Electronics Engineers and the Institute of Electronics and Communication Engineers of Japan.

W. Frank King III

Research Division, San Jose, California

Dr. King is manager of the Data Base Systems Department in the systems research group at the Research laboratory. He has participated in data base languages, data base system design and architecture. He joined IBM in 1969 at the Thomas J. Watson Research Center in Yorktown Heights, New York, where he analyzed the behavior of paging algorithms and was also involved in data base research, especially in the area of automatic data base design. He received a B.S. with high honors from the University of Florida in 1963, an M. S. from Stanford University in 1964 and a Ph.D. in 1969 from Princeton University in 1969, all in electrical engineering. He is an editor of *Information Systems*, a member of the Association for Computing Machinery and the Institute of Electrical and Electronics Engineers.

David F. Kyser

Research Division, San Jose, California

Dr. Kyser is a member of the thin film physics group of the Physical Science Department. Since joining IBM in 1968 he has pursued research in electron beam technology with specific publications in quantitative electron probe microanalysis, soft x-ray spectroscopy, S/7 computer-aided electron microprobes, and magnetic contrast in microscopy in the scanning electron microscope. He received a B.S. in engineering from the University of California at Los Angeles in 1961 and an M.S. and a Ph.D. in electrical engineering from the University of Southern California in 1964 and 1967. Dr. Kyser is a member of the American Physical Society, the Institute of Electrical and Electronics Engineers, and the Microbeam Analysis Society (formerly the Electron Probe Analysis Society of America). He is also a member of the Executive Council of the Microbeam Analysis Society.

Ho Chong Lee

System Development Division, Endicott, New York

Dr. Lee is an advisory engineer in the printer technology group in the Endicott laboratory. He has been engaged in the development of printer components since he joined IBM in 1968. He was an Assistant Professor of Mechanical Engineering at Rensselaer Polytechnic Institute, Troy, New York, 1962 to 1968. During this time he was also retained as a consultant to the Mechanical Technology, Inc., Latham, New York, and to the General Electric Company, Schenectady, New York. His education includes a B.S. in mechanical engineering from the University of Bridgeport, Connecticut, 1957; an M.S., 1959, and a Ph.D. in mechanical engineering, 1962, both from Rensselaer Polytechnic Institute. He is a member of the American Society of Mechanical Engineers.

David W. Low

Data Processing Division, Scientific Center, Los Angeles, California

Dr. Low joined IBM in 1964 as a systems engineer and is presently a member of the Los Angeles Scientific Center. His current research includes topics in distribution systems, discrete event simulation, optimization in stochastic processes, and automatic program generation. He previously was employed as a flight test engineer for Lockheed Aircraft Corporation in Burbank, California. His education includes B.A. and M.S. degrees in mathematics from the University of California at Los Angeles, 1963, and California State University-Northridge, 1966, and a Ph.D. in mathematics and operations research from U.C.L.A., 1971. Dr. Low is a member of the Association for Computing Machinery, the Operations Research Society of America, and the Institute of Management Science.

Angelo Mennone

Research Division, Yorktown Heights, New York

Mr. Mennone is a member of the computer and circuit design automation group of the Applied Research Department at the Research Center. He joined IBM in 1965 and until 1968 worked in the Computer Science Department designing and implementing a computer net system for interactive use by computer designers. Since that time he has worked on various heuristic design automation algorithms and is continuing this research in the advanced technology group at the System Prod-

ucts Division in Poughkeepsie, New York, on a one-year assignment from 1974 to 1975. He previously was employed by General Motors Corporation as a design engineer, mathematician from 1955 to 1961. He has also worked for the Radio Corporation of America as an A-Engineer from 1961 to 1965, developing data reduction computer programs for the Down Range Anti-Missile Measurement Program in the Missile and Surface Radar Division. Mr. Mennone holds a B.S. degree in engineering mathematics from the University of Michigan, which he received in 1950. Mr. Mennone is a member of the Association for Computing Machinery, the Institute of Electrical and Electronics Engineers, the Scientific Research Society of North America, and the Society for Industrial and Applied Mathematics.

Kenji Murata

Osaka University, Osaka, Japan

Since 1967 Dr. Murata has been an Assistant Professor in the Applied Physics Department at Osaka University. He is currently involved in a fundamental study of incident electron behavior in electron probe microanalysis and scanning electron microscopy. Dr. Murata was associated with IBM from 1972 to 1973 in the San Jose Research laboratory as a World Trade Corporation Postdoctoral Fellow, where he was a member of the thin film physics group of the Physical Science Department. He received an A.B. in electrical engineering from the University of Osaka Prefecture, 1962, and an M.S. and a Ph.D. from Osaka University in applied physics, 1964 and 1967. Dr. Murata is a member of the Japanese Society of Applied Physics and the Crystallographic Society of Japan.

Henri J. Nussbaumer

Centre d'Etudes et Recherches, La Gaude, France

Mr. Nussbaumer is manager of education and the technical vitality program at the La Gaude laboratory. He initially joined IBM France at the development laboratory in Paris in 1957, where he worked on solid state circuits. In 1960 he transferred to the Poughkeepsie laboratory and worked on electro-deposition of magnetic films. He returned to IBM France at the La Gaude laboratory in 1962 as manager of an advanced development group to work on parametric circuits. He was appointed manager of line switching product development in 1964 and became manager of technology from 1963 to 1973. He received an IBM Outstanding Contribution Award in 1969 for work on electronic crosspoint switches and several invention awards for work on parametric circuits and communication techniques. Mr. Nussbaumer graduated from the Ecole Centrale des Arts et Manufactures, Paris, in 1954.

Stephen E. Smith

Research Division, Yorktown Heights, New York

Dr. Smith joined IBM in 1970 at the Thomas J. Watson Research Center where he worked on operating systems and storage management. He is currently a member of the Computer Sciences Department and is involved with the study of automatic data base design. His education includes a B.S. in 1966, an M.S. in 1968 and a Ph.D. in 1970, all in electrical engineering, from Northwestern University. Dr. Smith is a member of Sigma Xi and Tau Beta Pi.

Irving Wladawsky

Research Division, Yorktown Heights, New York

Dr. Wladawsky joined IBM in 1970 and is currently developing automatic programming for business applications at the Thomas J. Watson Research Center. He has also worked on a variety of problems related to the design and implementation of operating systems. More recently he has worked in the area of programming languages and customizing systems for business problems. Dr. Wladawsky is also an instructor of computer systems at the Polytechnic Institute of New York. He received M.S. and Ph.D. degrees in physics from the University of Chicago in 1965 and 1972. He is a member of the Association for Computing Machinery.

Peter K. Wolff, Sr.

Research Division, Yorktown Heights, New York

Mr. Wolff is a member of the circuit and computer design automation group at the Thomas J. Watson Research Center and is currently working in the area of development and application of algorithms and software to facilitate the physical design of computers. He joined IBM in 1961 with the Research Division in Poughkeepsie, New York, and until 1963 was involved in the application of mask fabrication technology to cryogenic circuits. Mr. Wolff attended New York State Maritime College, where he studied marine engineering. He is a member of the Association for Computing Machinery. In 1968 he received an IBM Outstanding Contribution Award for his work on the automated logic mapping system.

Contents of previous issues

March 1974

Vol. 18, No. 2

• Papers

Interface Imaging by Scanning Internal Photoemission <i>T. H. DiStefano and J. M. Viggiano</i>	94
Calculations of Stable Domain Radii Produced by Thermomagnetic Writing <i>B. G. Huth</i>	100
Accuracy of the Diffusion Approximation for Some Queuing Systems <i>M. Reiser and H. Kobayashi</i>	110
Investigation into Scheduling for an Interactive Computing System <i>H. A. Anderson, Jr., and R. G. Sargent</i>	125

Parallel Solution of Recurrence Problems <i>P. M. Kogge</i>	138
Self-directional Microwave Communication System <i>E. L. Gruenberg, H. P. Raabe and C. T. Tsitsera</i>	149
Image Data Compression by Predictive Coding I: Prediction Algorithms <i>H. Kobayashi and L. R. Bahl</i>	164
II: Encoding Algorithms <i>L. R. Bahl and H. Kobayashi</i>	172

• *Papers*

On Optimization of Storage Hierarchies <i>C. K. Chow</i>	194
Loss of Point-to-Point Traffic in Three-stage Circuit Switches <i>M. Karnaugh</i>	204
Efficient Algorithm for the Partitioning of Trees <i>J. A. Lukes</i>	217
Photolithography in Integrated Circuit Mask Metrology <i>H. R. Rottmann</i>	225
Analysis of an AC Gas Display Panel <i>C. Lanza</i>	232

Simulation of Cyclic Operation of a Gas
Panel Device

F. M. Lay, C. K. Chu, and P. H. Haberland 244

On Proving Correctness of Microprograms

A. Birman 250

• *Communications*Channel Equalization Using a Kalman Filter
for Fast Data Transmission

D. Godard 267

Stress Analysis of Glass-Bonded Ferrite
Recording Heads

T. Tang 274



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