Conference Publications

The publications listed below have become available since the last issue of this bulletin and, except as noted, were sent automatically to present subscribers to the appropriate option and suboption of the IEEE Open Order Plan (OOP). All conference publications are identified by appropriate OOP suboption codes. For completeness, the listing includes special issues or sections of IEEE periodicals that are devoted to IEEE conferences, as well as Conference Publications in the strict sense. Out-of-Stock items may be found in the Engineering Societies Library in New York City and in all libraries that subscribe to OOP.


Coverage: pH control; process control; DP transmitters; energy conservation and systems; energy and the environment; computer control applications; automation research; cryogenic systems and government agencies; pattern recognition; dynamics and control of chemical reactors; application of fuzzy sets; control components and techniques; control in bioengineering; system simulation, stability and modeling; biocybernetics.

Automotive Electronics, 1978 International Conference on, (title varies, previously Automotive Electronics and Electric Vehicles, 1976 International Conference on), held Sep 25-27, 1978 in Dearborn, MI; sponsored by SAE and IEEE VT. Proceedings—Convergence 78. 169p. LC 78-70426. $45.00. 78CH1343-3 VT. OOP 1B.

Coverage: Worldwide automotive electronics developments; EM1; EMC; solid-state memories and microprocessors; electronic fuel injection; displays; semi-conductor and transducer developments; automotive electronic reliability; electronic systems for vehicles of the 1980's.

AUTOTESTCON '78 International Automatic Testing Conference, held Nov 28-30, 1978 in San Diego, CA; sponsored by IEEE AES, IEEE IM and IEEE San Diego Section. Conf. Record. 405p. $25.00. 78CH1416-7 AES. OOP 1B, H

Sessions on: Automatic test generation; vehicle testing; software testing and verification; ATE: systems, techniques, IEEE Standards, software management and tools, projects; U.S. Air Force Modular Automatic Test Equipment (MATE) program; non-electronic testing; military test system requirements; support systems management; testability.


Sessions on: High-level programming techniques; bench programming procedures; op-codes and microcoding; new coding languages; microprocessor chips; bench equipment.


Sessions on: Mine illumination, communications, instrumentation and power systems; power instrumentation, automatic control and monitoring.


Sessions on: Stochastic processes; source coding; statistical pattern recognition; communication theory; computer networks; adaptive equalizers; spread-spectrum multiple-access communications.


Sessions on: Network evaluation techniques; communications architectures; network design, interfaces and protocols.


Scope: Computer applications, software methodologies and techniques.

Computer Software and Applications Conference (COMPSAC 78), Tutorial Distributed Data Base Management, see Distributed Data Base Management, Tutorial.

Computer Software and Applications Conference (COMPSAC 78), Tutorial: Microcomputer Programming and Software Support, see Microcomputer Programming and Software Support, Tutorial.

Computer Software and Applications Conference (COMPSAC 78), Tutorial: Software Methodology, see Software Methodology, Tutorial.

Cybernetics and Society, [8th] International Conference on, held Nov 3-7, 1978 in Tokyo-Kyoto, Japan; sponsored by IEEE SMC and IEEE Tokyo Section. Proceedings. 3v. 1583p. LC 74-170870. $40.00. 78CH1306-0 SMC. OOP 1F.

Coverage: 49 sessions divided into the following six symposia: Biomedical systems and biocybernetics; human behavior and social systems; economic systems; technology; environment and resources; computer application to public service; systems science and cybernetics.

Digital Satellite Communications, 4th International Conference on, held Oct 23-25, 1978 in Montreal, Canada; sponsored by IEEE Canadian Region (Region 7) INTELSAT, Teleglobe Canada, et al. Conf. Record. 357p. $20.00. 78CH1326-8
REG 7. OOP IE

Sessions on: New services, applications and general systems strategies for computer systems and applications; computer operating systems; software engineering; algorithm design; computer systems and applications; computer system design; on board systems; integration with terrestrial networks; signal processing and coding; field trials and experiments; TMDA systems and techniques.


Coverage: Computer display technology; color, monochrome, and audio displays; device terminology; display performance criteria; image processing; display electronics, light emitting diodes, plasma displays, liquid crystals and cathode ray tubes.


Contents: Computer-organized and computer-supported systems; choosing programming languages; microcomputer software development systems; examples of microcomputer software development systems.


Sessions on: Processor and microprocessor macro instructions; processor family functions; optimal and automated generation of microcode; interpretive systems; signal processing; Lisp machines; microlanguages.


Coverage: New developments in communications, including electronics, optics, space, radio, satellite, space data and computer communications; electronic compatibility; social implications of technology; standards coordination; aerospace and electronic systems; geoscience.


Coverage: Pipeline, general and special purpose architectures; language and control; distributed processing; SIMD architectures; data flow; scheduling; interconnection technology; data base machines; arithmetic processors.


Coverage: Underground cable distribution for, and computer generation and printing; petroleum and chemical industry computer systems; and electrical power systems; chemical manufacturing; production of petroleum products; electrical power generation; automatic control of factory power systems; motor control; and general process equipment.


Sessions on: Photovoltaic power systems; low cost production; research and development; silicon material; field test; array production and system costs; economics and market analysis; system studies; basic ray data; silicon cells for space applications; space radiation effects and GaAs concentrators.


Sessions on: Satellite navigation; precise time and frequency; hyperspectral systems; machine vision; underwater navigation; automatic vehicle monitoring; test range; underwater navigation; road navigation; ionization technology and special applications.


Abstracts in IEEE Transactions on Power Apparatus and Systems, IEEE PES. Conference Record. 1978, 150p.$10.00. 80-CH17493-4 IE. OOP IE.


Power Generation Conference, 7th Joint, ASME and IEEE held Sep 10-13, 1978 in Dallas, TX, sponsored by IEEE PE and ASME. Conference Record. 1978, 135p.$10.00. 80-CH17392-2 PWE. OOP IE.

This comprehensive conference and technology in managing software over its life cycle: describes various components of the life cycle; ways to delineate and analyze relationships among components in order to develop and use tools to help direct, coordinate, understand and control research and development in software life cycle management; development of management tools using the results of life cycle management research to help plan and manage software development projects.


Software lifecycle management and technology in managing software over its life cycle: describes various components of the life cycle; ways to delineate and analyze relationships among components in order to develop and use tools to help direct, coordinate, understand and control research and development in software life cycle management; development of management tools using the results of life cycle management research to help plan and manage software development projects.


Coverage: State-of-the-art in software development methodology. This book is divided into two basic sections: one section is a technique applicable to large and complex applications such as air traffic control systems, distributed commercial systems, banking systems, airline reservation systems, and data base systems.

Special Issues

The special issues listed below have become available since the last issue of this Bulletin. Special issues devoted entirely to conferences are listed in the Conference Publications section.

Analog Circuits (8 of the 13 papers in this issue were presented in conference form at the IEEE Southeastern Conferences in Feb. 1978; see 1978 bulletin for Digest of Technical Papers); IEEE Journal of Solid State Circuits, June 1978, 8(3) 372-419. JSSC 801028. OOP IE.

Coverage: New trends and advances in the field of solid-state circuits, including: new solutions to the problems of achieving single chip monolithic circuits with high density and high performance; development of new types of analog circuits; development of a versatile monolithic all bipolar light sensor with high and stable light-current conversion characteristics to be used as an interface from the ac power line to a low dc voltage with 30 percent ef


Coverage: Selection of transmission media for microwave and millimeter-wave systems; basic theories and design principles and electrical requirements most economically. New techniques which minimize parasites and improve the device-circuit interface are explained.


Coverage: Selection of transmission media for microwave and millimeter-wave systems; basic theories and design principles and electrical requirements most economically. New techniques which minimize parasites and improve the device-circuit interface are explained.

IEEE Standards


Miscellaneous Publications


Coverage: Theory regarding the phenomena of electric and magnetic fields associated with ac transmission lines; updated calculation and measurement techniques; short term effects and mitigation methods in response to public concerns; emerging regulatory involvement.


Coverage: Technical report of symposium held at the 1978 IEEE/ASME/ASCE Joint Power Generation Conference, contains symposia of selected presentations made during the plenary session, materials provided by the authors at the technical sessions and a bibliography with abstracts.


Coverage: Theoretical foundations; static and dynamic analysis; tools and techniques; effectiveness assessment; management and planning; research and development. Replaces earlier text by Edward F. Miller, Program Testing Techniques (Tutorial), IEEE Computer Society, 1970.


Coverage: Concepts in surge phenomena, protection and insulation coordination; modern procedures and practices in the application of surge protective devices: station and station equipment; lines, cables and connected equipment; underground and overhead distribution systems; rotating machines; gas insulated substations.

Conference Records on Microfiche

All 1978 and 1979 conference records and digests are now also available on microfiche at the same price as listed for the printed editions.

Delivery is made by first class mail (air mail overseas), in contrast to printed copies which are mailed at the book rate and require a longer delivery time.

To order the microfiche edition of any conference publication, enter the appropriate “CM” code in the Publication Order No. column on the order form.

IEEE Journals on Microfilm comprise the world’s major archive on modern electrical/electronics engineering.

IEEE Journals on Microfilm comprise an Information System that provides quick access—for viewing or printout—to the fundamental literature of modern electrical and electronics engineering. Both backfiles and updates are available on 16 mm or 35 mm positive or negative film, in cartridges or reels. All film is processed in accordance with archival standards as set by the National Bureau of Standards.

Backfiles: Date from 1884 through 1975 and include all periodicals of the IEEE's predecessor societies—The Institute of Radio Engineers and The American Institute of Electrical Engineers. Purchasers of the complete backfiles of all of the IEEE Transactions (1951-1975) are entitled to sizable discounts of the sum of the individual Transactions prices.

Annual Updates: Include all IEEE periodicals published since January 1, 1976, on a yearly basis. Purchasers of all IEEE Transactions on microfilm for a single year receive sizable discounts under the total of the individual Transactions prices. They also receive a free copy of the annual combined INDEX TO IEEE PUBLICATIONS for that year.


No. F-15 Rev. 4/78. Send your request to: IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854.

Supplementary Information

Out-of-Stock Publications: Xerox or microfilm copies of most out-of-stock publications may be obtained from the Engineering Societies Library, 345 East 47th Street, New York, N.Y. 10017; the Library will supply price information on request. Most IEEE Journal issues for 1976 and earlier years are available from Walter J. Johnson, Inc., Back Issues Dept., 355 Chestnut St., Norwood, N.J. 07648.

Open Order Plan Subscriptions: Automatic ordering of nonperiodical IEEE publications is available under an OOP (Open Order Plan). Please request brochure F-72 for details.

Price Information: All prices listed in this Bulletin are nonmember prices. If you are an IEEE member, please consult listings in IEEE Spectrum for the discounted prices to which you are entitled, and mention your member number when ordering.

Additional Copies of this Bulletin are available, at your request, for circulation to technical personnel in your organization.

How to Order

Orders should include publication title, product number printed in boldface in the listings, price, and quantity desired. There is a $2.00 billing charge on all non-prepaid orders of under $100.00. Add $2.00 shipping-handling charge if order includes an IEEE Standard. (New Jersey residents please add 5% sales tax.) Send all orders to:

IEEE Service Center
Publication Sales Dept.
445 Hoes Lane
Piscataway, NJ 08854
(201) 981-0060
Telecopier No. 212-752-4929
Telex No. 236-411

Published four times a year at:
IEEE Headquarters
345 East 47th Street
New York, NY 10017

Managing Editor: Kaarin Kolbre
Associate Editor: Irene Perry