THE BOOKSHELF

Just out . . .


This tutorial is a decision-making aid designed to help those responsible for purchasing an ECG computer system. It consists of pertinent articles from a variety of journals and a substantial amount of new material. In 19 articles, the nature of computerized ECG systems, the available analytical programs, criteria for choosing a system, economic considerations, system impact on staff and patient care, and the limitations of computer systems are discussed.

Non-members—$22.00 Members—$16.50


This conference explored the pervasive impact of the computer on medicine. The more than 300 papers in these proceedings cover applications in hospital information systems, radiology, oncology, the medical laboratory, the pharmacy, nutrition, cardiology, intensive care, instrumentation, signal processing, simulation, occupational health, office practice, quality assurance, mental health, data management, development tools, networks, decision making, legal issues, administration, and the medical use of information technology.

Non-members—$68.00 Members—$51.00


These proceedings consist of 30 long and 43 short papers. Of these, 18 deal with testing and diagnosis, seven with self checking, 14 with evaluation methods and concepts, seven with memory coding, and three with hardware design verification. The remaining 24 cover fault-tolerant design, use of software to improve reliability, and enhancement of software reliability.

Non-members—$25.00 Members—$18.75


This conference, cosponsored by the IEEE Computer Society and SPIE, is a forum for state-of-the-art research on optical information processing theory and techniques. Book I contains 38 papers with an emphasis on the problems of image acquisition via arrays of sensors and constrained iterative methods for constructing images from incomplete data. Book II, with 33 papers, centers on new methods of image acquisition and signal processing including polychromatic, time integration, and numerical processing techniques.

Non-members—$30.00 Members—$23.00

Recent publications . . .


Presenting a quantitative methodology of cost estimating, this tutorial discusses economics, trade-off opportunities, and investment strategies for effective planning and control of software development. Designed for engineers at the MS level and business management analysts at the MBA level, it features almost 100 pages specially written by Putnam for this volume, along with 18 reprints.

Non-members—$20.00 Members—$16.00


A new quantitative approach to software management and engineering is reflected in this tutorial, which focuses on product-oriented attributes such as size, complexity, and reliability, and process-oriented attributes such as cost, schedules, and resources. The 27 articles include four specially adapted and one newly written for this tutorial.

Non-members—$20.00 Members—$15.00


These 39 timely reprints from diverse, important sources focus on why the program language designer makes certain decisions during the design process, and why they are superior to rejected alternatives. Sections are devoted to design, control structures, data types, Pascal, ADA, data base management and exception handling, design case studies, and axiomatic definition of programming languages.

Non-members—$20.00 Members—$15.00


This conference was sponsored by the IEEE Computer Society Technical Committee on Computer Communications, the Twin Cities IEEE Chapter, and the Computer Center of the University of Minnesota. The 18 papers cover commercial and military LCNs, office automation, network architecture, protocols, broadcast systems, LCN penetration forecast methodology, and standards.

Non-members—$20.00 Members—$15.00


The 106 papers in these proceedings are drawn from 39 sessions. They deal with a wide range of topics, exploring the interplay of management techniques and this new computing tool in papers on human factors, performance evaluation, and software costs, and analyzing technical issues in areas such as network architectures, research directions, kernels, LCNs, VLSI chips, design methodology, and standards.

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