
Whether designed to share information, share resources, or cooperate in accomplishing large processing tasks, networks of small computers, intelligent terminals, work stations, or specialized devices are installed in a wide variety of application environments. This tutorial—devoted exclusively to systems or networks of microcomputers—contains more than 30 reprints, as well as case studies outlining a number of networks and approaches.

Non-members—$20.00 Members—$15.00


The second edition of this tutorial provides both beginning and experienced managers with the materials needed to develop a clear understanding of the basic theories, tools, techniques, and skills of software management. Areas examined in the 70 reprints include planning, organizing, staffing, direction, and controlling. Case studies cover such topics as the effectiveness of software engineering techniques and an analysis of resources used in safeguard systems for software development.

Non-members—$25.00 Members—$18.75


First presented at Compsac 81, this tutorial describes the major issues surrounding the improvement of software productivity. It also looks at the environmental aspects of software development and analyzes the impact of working conditions and tools on human performance in computer programming. The 39 articles included fall into such categories as programming measurements, requirements, and environments, plus alternatives to programming.

Non-members—$28.00 Members—$21.00


The editors predict an accelerating shift in the 1980's from data-base facilities that focus on hardware efficiency to those that focus on the needs of the user. Their tutorial, initially presented at Compon Fall 81, addresses tools for data-base access, coupling a programming language to a data base, data-base design, data-base-management system design, and hardware aids; it includes a three-article introductory section and section overviews.

Non-members—$25.00 Members—$18.75


With the inclusion of 11 articles that did not appear in the first edition (1978), this tutorial has been expanded by nearly 50 percent. The six topical sections—theoretical foundations, static analysis, effectiveness assessment, management and planning, and research and development—begin with summaries of the reprints included. The editors also provide general introductions to validation and testing technology, a glossary, and a bibliographic update of over 700 entries.

Non-members—$25.00 Members—$18.75


The design, development, and deployment of advanced systems require skills from many disciplines, including data acquisition, distributed computing, and decentralized control. The complexity of the problem is greatest in real-time systems where external influences generate inputs that must be processed in a specific time. The symposium proceedings contain 19 papers in the areas of computer networks, fault tolerance, and real-time control.

Non-members—$16.00 Members—$12.00


These proceedings contain 20 papers presented at the symposium sponsored by the IEEE Computer Society's Technical Committees on Computer Communications and the National Bureau of Standards' Institute for Computer Sciences and Technology.

Non-members—$16.00 Members—$12.00


Based on an unusual and innovative symposium, these proceedings present ways of using personal computers for artistic tasks in such fields as movies, graphics, music, and sculpture and include several pages of four-color plates depicting representative art work.

Non-members—$16.00 Members—$12.00


The IEEE Computer Society's Fifth Annual International Conference on Computer Software and Applications provided a forum for the latest significant and innovative contributions in software and applications. These proceedings contain 65 papers on such topics as data bases, operating systems, storage management, and laboratory and manufacturing automation.

Non-members—$36.00 Members—$27.00


Microprogramming has changed from a machine implementation process for large computing devices to a widespread design practice covering the full spectrum of machines during the past ten years. These changes are discussed in the proceedings of the 14th Annual Microprogramming Workshop, one of a long and successful series of workshops sponsored by Sigmicro and the IEEE Computer Society TC on Microprogramming.

Non-members—$20.00 Members—$15.00


In celebration of its tenth anniversary, this conference featured five invited papers essaying a history of parallel processing. The remaining 65 papers in the proceedings cover such topics as languages and compilers, distributed systems and networks, numerical algorithms, associative processing, multiprocessor architectures, non-numerical algorithms, special-purpose processors, interconnection networks, VLSI architectures, array processing, and performance evaluation.

Non-members—$25.00 Members—$18.75


The 93 papers in this proceedings represent the written contribution of nearly 200 speakers and panelists at the second annual conference and exhibition of the National Computer Graphics Association. Presented in their original form in the interest of timely circulation, the papers are grouped according to interest areas such as the human interface, independent software, business, CAD/CAM, mapping, communications, education, standards, statistics, and future applications.

Non-members—$36.00 Members—$25.00