

Listed are abstracts from recent papers and books by IBM authors. Inquiries should be directed to the publications and publishers cited.

Computer system performance, H. Hellerman (State University of New York at Binghamton) and T. F. Conroy (DPD Poughkeepsie, NY), McGraw-Hill Book Company, New York (1975). This book deals with computer system performance, as opposed to function. The first five chapters introduce performance and the nature of performance evaluation, including extensive sections on statistics and on queuing models. The last six chapters deal with performance issues that are specific to computer systems, including chapters on: single-component and single-job performance, operating systems: evolution and fundamentals, the IBM OS/360 operating system, time-sharing systems, virtual-storage principles, and virtual storage: system design context. The authors intend this text for senior undergraduate or for graduate courses and also for working computer professionals in research, development, and operations. 380 pp.

Magnetic bubble technology: integrated-circuit magnetics for digital storage and processing, Hsu Chang, Ed. (RES Yorktown Heights, NY), IEEE Press, The Institute of Electrical and Electronics Engineers, Inc., New York (1975). This compilation of previously published papers offers a current view of the state of the art of magnetic bubble technology. The 46 reprinted papers are grouped according to topic in six chapters. About one-third of the book consists of tutorial commentary by the editor and includes a critical examination of the current uses of the technology and an assessment of its potential applications. The chapters following an historical review of magnetic bubble research and development are devoted to devices, applications, physics, materials, and technology forecast. There is also a bibliography of 1300 papers for the period 1950–1974 and abstracts of issued U.S. patents on bubble domain devices.

Abstracts

Tavograms, T. Thananitayaudom (SCD Kingston, NY), *Modern Data* 9, No. 2, 29–34 (Feb. 1976). Tavograms are a nomographic technique that provides a quick, accurate estimate of transaction response time. The nomographs are based on simplified queuing equations used to calculate queuing delays on a full duplex multipoint communication line with polling. In designing an optimum network, iterating the nomograph procedure will provide a range of line configurations with loadings that satisfy a given response time constraint.