

Recent Papers by IBM Authors

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- Papers are listed alphabetically by name of journal.

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• Book abstracts

The New Way of Life in Production and Inventory Management, J. A. Orlicky (DPD HQ White Plains, NY), McGraw-Hill Book Co., Inc., New York, 1975.

This is a comprehensive treatment of the subject of time-phased material requirements planning (MRP), i.e., a computer-dependent set of techniques designed to perform a key function in production logistics planning. The MRP system converts a master production schedule into detailed requirements for each part and raw material and associates all quantities with data on timing, spanning a user-specified planning horizon; its outputs serve a triple purpose: inventory control, capacity planning, and priority (re)planning. The book progresses from perspectives to concepts, includes details of MRP logic and specifics on both user-interface and file-data considerations, and examines the impact of MRP from a management point of view.

The Program Development Process, Part 1: The Individual Programmer, J. D. Aron (SDD Gaithersburg, MD), Addison-Wesley Publishing Co., Inc., Reading, MA, 1974.

This book is intended to teach the *procedural* aspects of programming to the individual programmer, as a supplement to technological training. Chapters range from a history of the program development process to the uses of on-line terminals and include problem analysis and planning, program design, coding, and debugging and delivery. The chapter on coding covers top-down vs bottom-up programming, coding techniques, structured programs, performance, optimization, reliability, and maintenance. This book is the first of an expected twenty volumes in the Systems Programming Series, sponsored by IBM and published by Addison-Wesley.

Aufbau von Betriebssystemen (Structure of Operating Systems), P. G. Caspers (IBM Deutschland, Boeblingen), Walter de Gruyter & Co., Berlin and New York, 1974.

The structure of operating systems is described, which are systems implemented by using general programming techniques, such as lists, tables, etc. Starting with an explanation of some special hardware functions, the handling of interrupts is discussed as the central complex of each operating system. Data management, input/output processing, and loaders are parts that are always present. Descriptions of process management, job management, and systems control are also included.