1.

Record Nr.	UNINA9910337806103321
Autore	Blazewicz Jacek
Titolo	Handbook on Scheduling : From Theory to Practice / / by Jacek Blazewicz, Klaus H. Ecker, Erwin Pesch, Günter Schmidt, Malgorzata Sterna, Jan Weglarz
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-319-99849-8
Edizione	[2nd ed. 2019.]
Descrizione fisica	1 online resource (839 pages)
Collana	International Handbooks on Information Systems
Disciplina	343.73078624
Soggetti	Production management Information technology Business—Data processing Application software Industrial engineering Production engineering Operations Management IT in Business Information Systems Applications (incl. Internet) Industrial and Production Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Basics -- Definition, Analysis and Classification of Scheduling Problems -- Scheduling on One Processor -- Scheduling on Parallel Processors -- Communication Delays and Multiprocessor Tasks -- Scheduling in Hard Real-Time Systems -- Flow Shop Scheduling -- Open Shop Scheduling -- Scheduling in Job Shops -- Scheduling with Limited Processor Availability -- Time-Dependent Scheduling -- Scheduling under Resource Constraints -- Scheduling Imprecise Computations -- Online Scheduling -- Constraint Programming and Disjunctive Scheduling -- Scheduling in flexible Manufacturing Systems -- Computer Integrated Production Scheduling -- Scheduling in Logistics. .

Sommario/riassunto

This handbook provides a comprehensive introduction to the theory and applications of scheduling in advanced planning and computer systems. It addresses a broad audience including practitioners and researchers interested in scheduling, as well as graduate and advanced undergraduate students in the fields of computer science and computer engineering, operations research, industrial and real-time engineering, management science, business administration and information systems, and applied mathematics. The book begins by providing an introduction to and basic concepts from discrete mathematics. Single and multiple processor systems are covered, with a focus on multiprocessor tasks and hard real-time systems. Flow shop and open shop scheduling, as well as scheduling in job shops, are explained in detail. Issues like limited processor availability, time-dependence, resource constraints and imprecise computations are dealt with in dedicated chapters. Special attention is given to online scheduling, constraint programming and disjunctive scheduling. The book also features applications and cases involving flexible manufacturing systems, computer integrated production scheduling and logistics. In particular it presents case studies on optimization procedures for the production of acrylic glass and of helicopter parts in a flexible manufacturing system, an efficient decision support system for airport gate scheduling, concrete delivery planning, and berth and quay crane allocation at seaports.

2. Record Nr.	UNINA9910957259103321
Titolo	Calculating the secrets of life : applications of the mathematical sciences in molecular biology / / Eric S. Lander and Michael S. Waterman, editors
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, 1995
ISBN	9786610211388 9781280211386 1280211385 9780309556163 0309556163 9780585037233 058503723X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (299 p.)
Altri autori (Persone)	LanderEric S WatermanMichael S
Disciplina	574.8/8/0151
Soggetti	Genetics - Mathematical models Genetics - Statistical methods Molecular biology - Mathematical models Molecular biology - Statistical methods
Lingua di pubblicazione	Inglese
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Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Calculating the Secrets of Life -- Copyright -- Preface -- Contents -- Calculating the Secrets of Life -- Chapter 1 The Secrets of Life: A Mathematician's Introduction to Molecular Biology -- BIOCHEMISTRY -- CLASSICAL GENETICS -- MOLECULAR BIOLOGY -- THE RECOMBINANT DNA REVOLUTION -- MOLECULAR GENETICS IN THE 1990S -- THE HUMAN GENOME PROJECT -- COMING ATTRACTIONS -- REFERENCES -- Chapter 2 Mapping Heredity: Using Probabilistic Models and Algorithms to Map Genes and Genomes -- GENETIC MAPPING -- The Concept of Genetic Maps -- Challenges of Genetic Mapping: Human Families and Complex Traits -- MAXIMUM LIKELIHOOD ESTIMATION -- Efficient Algorithms -- Statistical Significance -- Excursion: