Record Nr. UNINA9910829961003321 Autore **Huang Bo Titolo** Supervisory control and scheduling of resource allocation systems: reachability graph perspective / / [edited by] Bo Huang, Nanjing University of Science and Technology, Nanjing, China, Mengchu Zhou New Jersey Institute of Technology, Newark, NJ, USA Hoboken, New Jersey: ,: John Wiley & Sons, Inc., , [2020] Pubbl/distr/stampa [Piscatagay, New Jersey]:,: IEEE Xplore,, [2020] **ISBN** 1-119-61970-X 1-119-61969-6 1-119-61972-6 Edizione [First edition.] Descrizione fisica 1 online resource (287 pages) Collana IEEE Press series on systems science and engineering Disciplina 658.4034 Soggetti Resource allocation - Decision making Management information systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Reinforcement and systemic machine learning for decision making / Parag Kulkarni -- Remote sensing and actuation using unmanned vehicles / Haiyang Chao and YangQuan Chen -- Hybrid control and motion planning of dynamical legged locomotion / Nasser Sadati, Guy A. Dumont, Kaveh Akbari Hamed, and William A. Gruver. Sommario/riassunto "This book presents Petri net (PN) models and methods for supervisory control and system scheduling of resource allocation systems (RASs) which are common in practice, such as automated manufacturing systems, project management systems, cloud data centers, and software engineering systems. It begins with a brief definition of the Supervisory Control and Scheduling problems of RAS. Then, different types of Petri net models of RASs and their analysis methods are presented. Next, the book is divided into two parts to provide different speed-up methodologies with numerical experiments for supervisory control and heuristic scheduling, respectively. Conclusions and open

problems are provided in the last part of the book"--