

1. Record Nr.	UNINA9910299781503321
Titolo	Applied Simulation and Optimization : In Logistics, Industrial and Aeronautical Practice / / edited by Miguel Mujica Mota, Idalia Flores De La Mota, Daniel Guimaraes Serrano
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-15033-2
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (323 p.)
Disciplina	003.3 004 510 519 670
Soggetti	Computer science - Mathematics Applied mathematics Engineering mathematics Computer simulation Industrial engineering Production engineering Computational Science and Engineering Mathematical and Computational Engineering Simulation and Modeling Industrial and Production Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Simulation-based Optimization with HeuristicLab: Practical Guidelines and Real World Applications -- Simulation Optimization Approach to solve a complex multiobjective redundancy allocation problem -- OR AND SIMULATION IN COMBINATION FOR OPTIMIZATION -- Tree Search and Simulation -- Integrated solutions for delivery planning and scheduling in distribution centres -- Large Neighbourhood Search and Simulation for Disruption Management in the Airline Industry --

Allocation of Airport check-in counters using a Simulation–Optimization Approach -- Simulation and Optimization of the Pre-hospital Care System of the National University of Mexico -- Simulation Based Optimization Using Greedy Techniques and Simulated Annealing for Optimal Equipment Selection within Print Production Environments -- Linear Bus Holding Model for Real Time Traffic Network Control.

Sommario/riassunto

Presenting techniques, case-studies and methodologies that combine the use of simulation approaches with optimization techniques for facing problems in manufacturing, logistics, or aeronautical problems, this book provides solutions to common industrial problems in several fields, which range from manufacturing to aviation problems, where the common denominator is the combination of simulation's flexibility with optimization techniques' robustness. Providing readers with a comprehensive guide to tackle similar issues in industrial environments, this text explores novel ways to face industrial problems through hybrid approaches (simulation-optimization) that benefit from the advantages of both paradigms, in order to give solutions to important problems in service industry, production processes, or supply chains, such as scheduling, routing problems and resource allocations, among others.