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Titolo	Nature-Inspired Computation in Navigation and Routing Problems : Algorithms, Methods and Applications // edited by Xin-She Yang, Yu-Xin Zhao
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-1842-4
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (230 pages) : illustrations
Collana	Springer Tracts in Nature-Inspired Computing, , 2524-552X
Disciplina	006.3
Soggetti	Computational intelligence Algorithms Computer science—Mathematics Computer simulation Computational Intelligence Algorithm Analysis and Problem Complexity Mathematics of Computing Simulation and Modeling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Navigation, Routing and Nature-Inspired Computation -- Navigation and Navigation Algorithms -- Is Vehicle Routing Problem Dead? Review of Vehicle Routing Problems from a Nature-Inspired Perspective -- Travelling Salesman Problem: Resolution Layers -- Flow Shop Scheduling by Nature-Inspired Algorithms -- Mobile Robot Path Planning by Flower Pollination Algorithm -- Smartphone Indoor Localization Using Bio-Inspired Modeling -- A New Obstacle Avoidance Technique - Travelling Cranes -- Natural Heuristic Methods for Under Water Vehicle Path Planning.
Sommario/riassunto	This book discusses all the major nature-inspired algorithms with a focus on their application in the context of solving navigation and routing problems. It also reviews the approximation methods and recent nature-inspired approaches for practical navigation, and compares these methods with traditional algorithms to validate the approach for the case studies discussed. Further, it examines the

design of alternative solutions using nature-inspired techniques, and explores the challenges of navigation and routing problems and nature-inspired metaheuristic approaches. .
