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| Titolo | Nature-inspired optimization algorithms with Java : a look at optimization techniques // Shashank Jain |
| Pubbl/distr/stampa | New York, New York : , : Apress L. P., , [2022] ©2022 |
| ISBN | 1-4842-7401-6 |
| Descrizione fisica | 1 online resource (182 pages) |
| Disciplina | 519.6 |
| Soggetti | Mathematical optimization Nature-inspired algorithms Java (Computer program language) |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Includes index. |
| Nota di contenuto | 1. Introduction to Optimization: Problems and Techniques -- 2. Mammals: Whale, Gray Wolf, and Bat Optimization -- 3. Birds: Particle Swarm and Cuckoo Search Optimization -- 4. Insects: Firefly Optimization -- 5. Sea Creatures: Salp Swarm Optimization. |
| Sommario/riassunto | Gain insight into the world of nature-inspired optimization techniques and algorithms. This book will prepare you to apply different nature-inspired optimization techniques to solve problems using Java. You'll start with an introduction to the hidden algorithms that nature uses and find the approximate solutions to optimization problems. You'll then see how living creatures such as fish and birds are able to perform computation to solve specific optimization tasks. This book also covers various nature-inspired algorithms by reviewing code examples for each one followed by crisp and clear explanations of the algorithm using Java code. You'll examine the use of each algorithm in specific industry scenarios such as fleet scheduling in supply chain management, and shop floor management in industrial and manufacturing applications. Nature-Inspired Optimization Algorithms with Java is your pathway to understanding a variety of optimization problems that exist in various industries and domains and it will develop an ability to apply nature-inspired algorithms to find |

approximate solutions to them. You will: Study optimization and its problems Examine nature-inspired algorithms such as Particle Swarm, Gray wolf, etc. See how nature-inspired algorithms are being used to solve optimization problems Use Java for solving the different nature-inspired algorithms with real-world examples.
