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Titolo	Evolutionary Data Clustering: Algorithms and Applications / / edited by Ibrahim Aljarah, Hossam Faris, Seyedali Mirjalili
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ISBN	981-334-191-2
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (253 pages) : illustrations
Collana	Algorithms for Intelligent Systems, , 2524-7573
Disciplina	518.1
Soggetti	Computational intelligence Algorithms Data mining Mathematical optimization Computational Intelligence Data Mining and Knowledge Discovery Optimization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction to Evolutionary Data Clustering and its Applications -- A Comprehensive Review of Evaluation and Fitness Measures for Evolutionary Data Clustering -- A Grey Wolf based Clustering Algorithm for Medical Diagnosis Problems -- EEG-based Person Identification Using Multi-Verse Optimizer As Unsupervised Clustering Techniques -- Review of Evolutionary Data Clustering Algorithms for Image Segmentation -- Classification Approach based on Evolutionary Clustering and its Application for Ransomware Detection.
Sommario/riassunto	This book provides an in-depth analysis of the current evolutionary clustering techniques. It discusses the most highly regarded methods for data clustering. The book provides literature reviews about single objective and multi-objective evolutionary clustering algorithms. In addition, the book provides a comprehensive review of the fitness functions and evaluation measures that are used in most of evolutionary clustering algorithms. Furthermore, it provides a conceptual analysis including definition, validation and quality measures, applications, and implementations for data clustering using

classical and modern nature-inspired techniques. It features a range of proven and recent nature-inspired algorithms used to data clustering, including particle swarm optimization, ant colony optimization, grey wolf optimizer, salp swarm algorithm, multi-verse optimizer, Harris hawks optimization, beta-hill climbing optimization. The book also covers applications of evolutionary data clustering indiverse fields such as image segmentation, medical applications, and pavement infrastructure asset management.