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Titolo	Integrating Meta-Heuristics and Machine Learning for Real-World Optimization Problems / / edited by Essam Halim Houssein, Mohamed Abd Elaziz, Diego Oliva, Laith Abualigah
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Note generali	Description based upon print version of record.
Nota di contenuto	Combined Optimization Algorithms for Incorporating DG in Distribution Systems -- Intelligent computational models for cancer diagnosis: A Comprehensive Review -- Elitist-Ant System metaheuristic for ITC 2021- Sports Timetabling -- Swarm intelligence algorithms-based Machine Learning Framework for Medical Diagnosis: A Comprehensive Review -- Aggregation of Semantically Similar News Articles with the help of Embedding Techniques and Unsupervised Machine Learning Algorithms: A Machine Learning Application with Semantic Technologies -- Integration of Machine Learning and Optimization Techniques for Cardiac Health Recognition -- Metaheuristics for Parameter Estimation of Solar Photovoltaic Cells: A Comprehensive Review -- Big Data Analysis using Hybrid Meta-heuristic Optimization Algorithm and MapReduce Framework -- Deep Neural Network for Virus Mutation Prediction: A Comprehensive Review -- 2D Target/Anomaly Detection in Time Series Drone Images using Deep Few-Shot Learning in Small Training Dataset -- Hybrid Adaptive Moth-Flame Optimizer and Opposition-Based Learning for Training Multilayer Perceptrons -- Early Detection of Coronary Artery Disease Using a PSO-

based Neuroevolution Model -- Review for meta-heuristic optimization propels machine learning computations execution on spam comment area under digital security aegis region -- Solving reality based optimization trajectory problems with different metaphor inspired metaheuristic algorithms -- Parameter Tuning of PID controller Based on Arithmetic Optimization Algorithm in IOT systems -- Testing and Analysis of Predictive Capabilities of Machine Learning Algorithms -- AI Based Technologies for Digital and Banking Fraud During COVID -19 -- Gradient-Based Optimizer for structural optimization problems -- Aquila Optimizer based PSO Swarm Intelligence for IoT Task Scheduling Application in Cloud Computing.

Sommario/riassunto

This book collects different methodologies that permit metaheuristics and machine learning to solve real-world problems. This book has exciting chapters that employ evolutionary and swarm optimization tools combined with machine learning techniques. The fields of applications are from distribution systems until medical diagnosis, and they are also included different surveys and literature reviews that will enrich the reader. Besides, cutting-edge methods such as neuroevolutionary and IoT implementations are presented in some chapters. In this sense, the book provides theory and practical content with novel machine learning and metaheuristic algorithms. The chapters were compiled using a scientific perspective. Accordingly, the book is primarily intended for undergraduate and postgraduate students of Science, Engineering, and Computational Mathematics and can be used in courses on Artificial Intelligence, Advanced Machine Learning, among others. Likewise, the material can be helpful for research from the evolutionary computation, artificial intelligence communities.