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Nota di contenuto	Chapter 1: Classification of Arrhythmia Using Artificial Neural Network with Grey Wolf Optimization -- Chapter 2: Multi-objective Biogeography-Based Optimization for Influence Maximization-Cost Minimization in Social Networks -- Chapter 3: Classification of Credit Dataset Using Improved Particle Swarm Optimization Tuned Radial Basis Function Neural Networks -- Chapter 4: Multi-verse Optimization of Multilayer Perceptrons (MV-MLPs) for Efficient Modeling and Forecasting of Crude Oil Prices Data -- Chapter 5: Application of machine learning to predict diseases based on symptoms in rural India -- Chapter 6: Classification of Real Time Noisy Fingerprint Images Using FLANN -- Chapter 7: Software Reliability Prediction with Ensemble Method and Virtual Data Point Incorporation -- Chapter 8: Hyperspectral Image Classification using Stochastic Gradient Descent based Support Vector Machine -- Chapter 9: A Survey on Ant Colony

Optimization for Solving Some of the Selected NP-Hard Problem -- Chapter 10: Machine Learning Models for Stock Prediction using Real-Time Streaming Data -- Chapter 11: Epidemiology of Breast Cancer (BC) and its Early Identification via Evolving Machine Learning Classification Tools (MLCT)–A Study -- Chapter 12: Ensemble Classification Approach for Cancer Prognosis and Prediction -- Chapter 13: Extractive Odia Text Summarization System: An OCR based Approach -- Chapter 14: Predicting sensitivity of local news articles from Odia dailies -- Chapter 15: A systematic frame work using machine learning approaches in supply chain forecasting -- Chapter 16: An Intelligent system on computer-aided diagnosis for Parkinson's disease with MRI using Machine Learning -- Chapter 17: Operations on Picture Fuzzy Numbers and their Application in Multi-Criteria Group Decision Making Problems -- Chapter 18: Some Generalized Results on Multi-Criteria Decision Making Model using Fuzzy TOPSIS Technique -- Chapter 19: A Survey on FP-Tree Based Incremental Frequent Pattern Mining -- Chapter 20: Improving Co-expressed Gene Pattern Finding Using Gene Ontology -- Chapter 21: Survey of Methods Used for Differential Expression Analysis on RNA Seq Data -- Chapter 22: Adaptive Antenna Tilt for Cellular Coverage Optimization in Suburban Scenario -- Chapter 23: A survey of the different itemset representation for candidate.

Sommario/riassunto

This book addresses many-criteria decision-making (MCDM), a process used to find a solution in an environment with several criteria. In many real-world problems, there are several different objectives that need to be taken into account. Solving these problems is a challenging task and requires careful consideration. In real applications, often simple and easy to understand methods are used; as a result, the solutions accepted by decision makers are not always optimal solutions. On the other hand, algorithms that would provide better outcomes are very time consuming. The greatest challenge facing researchers is how to create effective algorithms that will yield optimal solutions with low time complexity. Accordingly, many current research efforts are focused on the implementation of biologically inspired algorithms (BIAs), which are well suited to solving uni-objective problems. This book introduces readers to state-of-the-art developments in biologically inspired techniques and their applications, with a major emphasis on the MCDM process. To do so, it presents a wide range of contributions on e.g. BIAs, MCDM, nature-inspired algorithms, multi-criteria optimization, machine learning and soft computing.
