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Titolo	Computational Intelligence and Big Data Analytics : Applications in Bioinformatics // by Ch. Satyanarayana, Kunjam Nageswara Rao, Richard G. Bush
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Descrizione fisica	1 online resource (139 pages)
Collana	SpringerBriefs in Forensic and Medical Bioinformatics, , 2196-8845
Disciplina	006.3019
Soggetti	Computational intelligence Big data Bioinformatics Neural networks (Computer science) Biomedical engineering Application software Computational Intelligence Big Data Mathematical Models of Cognitive Processes and Neural Networks Biomedical Engineering/Biotechnology Information Systems Applications (incl. Internet)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Nanoinformatics: Predicting toxicity using Computational Modelling -- Stock market Prediction Based on Machine Learning Approaches -- Performance Analysis of Denoising of ECG Signals in Time and Frequency domain -- Design and Implementation of Modified Sparse K-means Clustering Method for Gene Selection -- Identifying driver potential in passenger genes using chemical properties of mutated and surrounding amino acids -- Diagnosis of Chest Diseases Using Artificial Neural networks -- Development of Microminiaturized Intramuscular EMG Writer's Cramp Signals Micro Electrode Recording System -- FGANN: A Hybrid Approach for Medical Diagnosing -- Data Mining Efficiency and Scalability for Smarter Internet of Things -- Multiple DG

Placement and Sizing in Radial Distribution System using Genetic Algorithm and Particle Swarm Optimization -- Neighborhood Algorithm For Product Recommendation -- A Quantitative Analysis of Histogram Equalization based methods on Fundus Images for Diabetic Retinopathy Detection -- A novel level based DNA security algorithm using DNA codons -- A Computational approach to Predict Diabetic Retinopathy through Data Analytics.

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#### Sommario/riassunto

This book highlights major issues related to big data analysis using computational intelligence techniques, mostly interdisciplinary in nature. It comprises chapters on computational intelligence technologies, such as neural networks and learning algorithms, evolutionary computation, fuzzy systems and other emerging techniques in data science and big data, ranging from methodologies, theory and algorithms for handling big data, to their applications in bioinformatics and related disciplines. The book describes the latest solutions, scientific results and methods in solving intriguing problems in the fields of big data analytics, intelligent agents and computational intelligence. It reflects the state of the art research in the field and novel applications of new processing techniques in computer science. This book is useful to both doctoral students and researchers from computer science and engineering fields and bioinformatics related domains.

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