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Descrizione fisica	1 online resource (VIII, 303 p. 101 illus., 80 illus. in color.)
Collana	Studies in Big Data, , 2197-6503 ; ; 24
Disciplina	620
Soggetti	Computational intelligence Data mining Artificial intelligence Big data Health informatics Health care management Health services administration Computational Intelligence Data Mining and Knowledge Discovery Artificial Intelligence Big Data/Analytics Health Informatics Health Care Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I. Fundamentals -- Large-Scale Clustering Algorithms -- On High Dimensional Search Space and Learning Methods.-Enhanced Over_Sampling Techniques for Imbalanced Big Data Set Classification -- Online Anomaly Detection in Big Data: The First Line of Defense Against Intruders -- Developing Modified Classifier for Big Data Paradigm: An Approach through Bio-Inspired Soft Computing -- Unified Framework for Control of Machine Learning Tasks Towards Effective and Efficient Processing of Big Data -- An Efficient Approach for Mining High Utility Itemsets over Data Streams -- Event Detection in

Location-Based Social Networks -- Part II. Applications -- Using Computational Intelligence for the Safety Assessment of Oil and Gas Pipelines: A Survey -- Big Data for Effective Management of Smart Grids -- Distributed Machine Learning on Smart-Gateway Network Towards Real-Time Indoor Data Analytics -- Predicting Spatiotemporal Impacts of Weather on Power Systems using Big Data Science -- Index.

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Sommario/riassunto

This book presents a comprehensive and up-to-date treatise of a range of methodological and algorithmic issues. It also discusses implementations and case studies, identifies the best design practices, and assesses data analytics business models and practices in industry, health care, administration and business. Data science and big data go hand in hand and constitute a rapidly growing area of research and have attracted the attention of industry and business alike. The area itself has opened up promising new directions of fundamental and applied research and has led to interesting applications, especially those addressing the immediate need to deal with large repositories of data and building tangible, user-centric models of relationships in data. Data is the lifeblood of today's knowledge-driven economy. Numerous data science models are oriented towards end users and along with the regular requirements for accuracy (which are present in any modeling), come the requirements for ability to process huge and varying data sets as well as robustness, interpretability, and simplicity (transparency). Computational intelligence with its underlying methodologies and tools helps address data analytics needs. The book is of interest to those researchers and practitioners involved in data science, Internet engineering, computational intelligence, management, operations research, and knowledge-based systems.

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