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Titolo	Data Science: New Issues, Challenges and Applications / / edited by Gintautas Dzemyda, Jolita Bernataviien, Janusz Kacprzyk
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ISBN	3-030-39250-3
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (325 pages) : illustrations
Collana	Studies in Computational Intelligence, , 1860-9503 ; ; 869
Disciplina	006.3
Soggetti	Engineering - Data processing Computational intelligence Data Engineering Computational Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Object Detection in Aerial Photos Using Neural Networks -- Modelling and Control of Human Response to a Dynamic Virtual 3D Face -- Knowledge-Based Transformation Algorithms of UML Dynamic Models Generation from Enterprise Model -- An Approach for Networking of Wireless Sensors and Embedded Systems Applied for Monitoring of Environment Data -- Non-Standard Distances in High Dimensional Raw Data Stream Classication -- Data Analysis in Setting Action Plans of Telecom Operators -- Extending Model-Driven Development Process with Causal Modeling Approach -- Discrete Competitive Facility Location by Ranking Candidate Locations -- Investigating Feature Spaces for Isolated Word Recognition -- Developing Algorithmic Thinking Through Computational Making -- Improving Objective Speech Quality Indicators in Noise Conditions -- Investigation of User Vulnerability in Social Networking Site -- Zerocross Density Decomposition: a Novel Signal Decomposition Method -- DSS – A Class of Evolving Information Systems -- A Deep Knowledge-Based Evaluation of Enterprise Applications Interoperability -- Sentiment-Based Decision Making Model for Financial Markets.
Sommario/riassunto	This book contains 16 chapters by researchers working in various fields of data science. They focus on theory and applications in language

technologies, optimization, computational thinking, intelligent decision support systems, decomposition of signals, model-driven development methodologies, interoperability of enterprise applications, anomaly detection in financial markets, 3D virtual reality, monitoring of environmental data, convolutional neural networks, knowledge storage, data stream classification, and security in social networking. The respective papers highlight a wealth of issues in, and applications of, data science. Modern technologies allow us to store and transfer large amounts of data quickly. They can be very diverse - images, numbers, streaming, related to human behavior and physiological parameters, etc. Whether the data is just raw numbers, crude images, or will help solve current problems and predict future developments, depends on whether we can effectively process and analyze it. Data science is evolving rapidly. However, it is still a very young field. In particular, data science is concerned with visualizations, statistics, pattern recognition, neurocomputing, image analysis, machine learning, artificial intelligence, databases and data processing, data mining, big data analytics, and knowledge discovery in databases. It also has many interfaces with optimization, block chaining, cyber-social and cyber-physical systems, Internet of Things (IoT), social computing, high-performance computing, in-memory key-value stores, cloud computing, social computing, data feeds, overlay networks, cognitive computing, crowdsource analysis, log analysis, container-based virtualization, and lifetime value modeling. Again, all of these areas are highly interrelated. In addition, data science is now expanding to new fields of application: chemical engineering, biotechnology, building energy management, materials microscopy, geographic research, learning analytics, radiology, metal design, ecosystem homeostasis investigation, and many others. .