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Titolo	Intelligent Data Analytics for Decision-Support Systems in Hazard Mitigation : Theory and Practice of Hazard Mitigation // edited by Ravinesh C. Deo, Pijush Samui, Ozgur Kisi, Zaher Mundher Yaseen
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Soggetti	Computational intelligence Fire prevention Buildings - Protection Environment Machine learning Water Hydrology Big data Computational Intelligence Fire Science, Hazard Control, Building Safety Environmental Sciences Machine Learning Big Data
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Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Drought Index Prediction using Data Intelligent Analytic Models: A Review -- Chapter 2: Bayesian Markov Chain Monte Carlo based copulas: Factoring the Role of Large-scale Climate Indices in Monthly Flood Prediction -- Chapter 3: Gaussian Naive Bayes Classification Algorithm for Drought and Flood Risk Reduction -- Chapter 4: Hydrological Drought Investigation using Streamflow Drought Index -- Chapter 5: Intelligent Data Analytics Approaches for Predicting Dissolved Oxygen Concentration in River: Extremely

Randomized Tree Vs Random Forest, MLPNN and MLR -- Chapter 6: Evolving Connectionist Systems versus Neuro-Fuzzy System for Estimating Total Dissolved Gas at Forebay and Tailwater of Dams Reservoirs -- Chapter 7: Modulation of Tropical Cyclone Genesis by Madden-Julian Oscillation in the Southern Hemisphere -- Chapter 8: Intelligent Data Analytics for Time-series, Trend Analysis and Drought Indices Comparison -- Chapter 9: Conjunction Model Design for Intermittent Streamflow Forecasts: Extreme Learning Machine with Discrete Wavelet Transform -- Chapter 10: Systematic Integration of Artificial Intelligence Towards Evaluating Response of Materials and Structures in Extreme Conditions. .

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#### Sommario/riassunto

This book highlights cutting-edge applications of machine learning techniques for disaster management by monitoring, analyzing, and forecasting hydro-meteorological variables. Predictive modelling is a consolidated discipline used to forewarn the possibility of natural hazards. In this book, experts from numerical weather forecast, meteorology, hydrology, engineering, agriculture, economics, and disaster policy-making contribute towards an interdisciplinary framework to construct potent models for hazard risk mitigation. The book will help advance the state of knowledge of artificial intelligence in decision systems to aid disaster management and policy-making. This book can be a useful reference for graduate student, academics, practicing scientists and professionals of disaster management, artificial intelligence, and environmental sciences. .

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