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	Autore	Pham Hoang
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Nota di contenuto	Preface -- 1. Reliability Analysis For Inventory Management For Repair Parts Based on Imperfect Data.-2. Improved Industrial Risk Analysis via a Human Factor-driven Bayesian Network Approach -- 3. Unsupervised Representation Learning Approach for Intrusion Detection in the Industrial Internet of Things Network Environment -- 4. Aero-engine Life Prediction Based on ARIMA and LSTM with Multi-Head Attention Mechanism -- 5. Human-Machine Integration to Strengthen Risk Management in the Winemaking Industry -- 6. One-Class Classification for Credit Card Fraud Detection: A Detailed Study with Comparative Insights from Binary Classification -- 7. Performance Analysis of Big Transfer Models on Biomedical Image Classification -- 8. Machine Learning Approach for Testing the Efficiency of Software Reliability Estimators of Weibull Class Models -- 9. Holistic Perishable Pharmaceutical Inventory Management System -- 10. Optimum Switch Self-Check Interval for Safety-Critical Device Mission Reliability -- 11. Accurate Estimation of Cargo Power Using Machine Learning Algorithms -- 12. Digital Transformation in Software Quality Assurance -- 13. Stress Studies: A Review -- 14. Higher Order Dynamic Mode Decomposition-based Timeseries Forecasting for Covid-19 -- 15. System Trustability: New Concept and Applications -- 16. Digital Twin Implementation in Small and Medium Size Enterprises: A Case Study -- 17. Software Reliability Modeling: A Review.
Sommario/riassunto	This book presents novel research and application chapters on topics in reliability, statistics, and machine learning. It has an emphasis on analytical models and techniques and practical applications in reliability engineering, data science, manufacturing, health care, and industry using machine learning, AI, optimization, and other computational methods. Today, billions of people are connected to each other through their mobile devices. Data is being collected and analysed more than ever before. The era of big data through machine learning algorithms, statistical inference, and reliability computing in almost all applications has resulted in a dramatic shift in the past two decades. Data analytics in business, finance, and industry is vital. It helps organizations and business to achieve better results and fact-based decision-making in all aspects of life. The book offers a broad picture of current research on the analytics modeling and techniques and its applications in industry. Topics include: l Reliability modeling and methods. l Software reliability engineering. l Maintenance modeling and policies. l Statistical feature selection. l Big data modeling. l Machine learning: models and algorithms. l Data-driven models and decision-making methods. l Applications and case studies in business, health care, and industrial systems. Postgraduates, researchers, professors, scientists, engineers, and practitioners in reliability engineering and management, machine learning engineering, data science, operations research, industrial and systems engineering, statistics, computer science and engineering, mechanical engineering, and business analytics will find in this book state-of-the-art analytics, modeling and methods in reliability and machine learning.