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Titolo	Combating Security Challenges in the Age of Big Data [[electronic resource] ] : Powered by State-of-the-Art Artificial Intelligence Techniques // edited by Zubair Md. Fadlullah, Al-Sakib Khan Pathan
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Collana	Advanced Sciences and Technologies for Security Applications, , 1613-5113
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Nota di contenuto	Secure Big data Transmission with Trust management for the Internet of Things (IoT) -- Concept Drift for Big Data -- Classification of Outlier's Detection Methods Based on Quantitative Or Semantic Learning -- Cognitive Artificial Intelligence Countermeasure For Enhancing The Security Of Big Data Hardware From Power Analysis Attack -- On the Secure Routing Protocols, Selfishness Mitigation, and Trust in Mobile Ad Hoc Networks -- Deep Learning Approaches For IoT Security In The Big Data Era -- Deep Learning meets Malware Detection: An Investigation -- The Utilization of Blockchain for Enhancing Big Data Security and Veracity -- Authentication Methodology for Securing Machine-to-Machine Communication in Smart Grid -- Combating

Intrusions in Smart Grid: Practical Defense and Forecasting Approaches  
-- Blockchain-based Distributed Key Management Approach Tailored  
for Smart Grid.

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Sommario/riassunto

This book addresses the key security challenges in the big data centric computing and network systems, and discusses how to tackle them using a mix of conventional and state-of-the-art techniques. The incentive for joining big data and advanced analytics is no longer in doubt for businesses and ordinary users alike. Technology giants like Google, Microsoft, Amazon, Facebook, Apple, and companies like Uber, Airbnb, NVIDIA, Expedia, and so forth are continuing to explore new ways to collect and analyze big data to provide their customers with interactive services and new experiences. With any discussion of big data, security is not, however, far behind. Large scale data breaches and privacy leaks at governmental and financial institutions, social platforms, power grids, and so forth, are on the rise that cost billions of dollars. The book explains how the security needs and implementations are inherently different at different stages of the big data centric system, namely at the point of big data sensing and collection, delivery over existing networks, and analytics at the data centers. Thus, the book sheds light on how conventional security provisioning techniques like authentication and encryption need to scale well with all the stages of the big data centric system to effectively combat security threats and vulnerabilities. The book also uncovers the state of the art technologies like deep learning and blockchain which can dramatically change the security landscape in the big data era. .

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