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Disciplina	005.8
Soggetti	Data protection Computer organization Artificial intelligence Computers Security Computer Systems Organization and Communication Networks Artificial Intelligence Information Systems and Communication Service Seguretat informàtica Dades massives Protecció de dades Intel·ligència artificial Llibres electrònics
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Nota di contenuto	1. Big Data and Privacy : Challenges and Opportunities -- 2. AI and Security of Critical Infrastructure -- 3. Industrial Big Data Analytics: Challenges and Opportunities -- 4. A Privacy Protection Key Agreement Protocol Based on ECC for Smart Grid -- 5. Applications of Big Data Analytics and Machine Learning in the Internet of Things -- 6. A Comparison of State-of-the-art Machine Learning Models for OpCode-Based IoT Malware Detection -- 7. Artificial Intelligence and Security of Industrial Control Systems -- 8. Enhancing Network Security via Machine Learning: Opportunities and Challenges -- 9. Network Security

and Privacy Evaluation Scheme for Cyber Physical Systems (CPS) -- 10. Anomaly Detection in Cyber-Physical Systems Using Machine Learning -- 11. Big Data Application for Security of Renewable Energy Resources -- 12. Big-Data and Cyber-Physical Systems in Healthcare: Challenges and Opportunities -- 13. Privacy Preserving Abnormality Detection: A Deep Learning Approach.-14. Privacy and Security in Smart and Precision Farming: A Bibliometric Analysis -- 15. A Survey on Application of Big Data in Fin Tech Banking Security and Privacy -- 16. A Hybrid Deep Generative Local Metric Learning Method For Intrusion Detection -- 17. Malware elimination impact on dynamic analysis: An experimental machine learning approach -- 18. RAT Hunter: Building Robust Models for Detecting Remote Access Trojans Based on Optimum Hybrid Features -- 19. Active Spectral Botnet Detection based on Eigenvalue Weighting -- .

Sommario/riassunto

This handbook provides comprehensive knowledge and includes an overview of the current state-of-the-art of Big Data Privacy, with chapters written by international world leaders from academia and industry working in this field. The first part of this book offers a review of security challenges in critical infrastructure and offers methods that utilize acritical intelligence (AI) techniques to overcome those issues. It then focuses on big data security and privacy issues in relation to developments in the Industry 4.0. Internet of Things (IoT) devices are becoming a major source of security and privacy concern in big data platforms. Multiple solutions that leverage machine learning for addressing security and privacy issues in IoT environments are also discussed this handbook. The second part of this handbook is focused on privacy and security issues in different layers of big data systems. It discusses about methods for evaluating security and privacy of big data systems on network, application and physical layers. This handbook elaborates on existing methods to use data analytic and AI techniques at different layers of big data platforms to identify privacy and security attacks. The final part of this handbook is focused on analyzing cyber threats applicable to the big data environments. It offers an in-depth review of attacks applicable to big data platforms in smart grids, smart farming, FinTech, and health sectors. Multiple solutions are presented to detect, prevent and analyze cyber-attacks and assess the impact of malicious payloads to those environments. This handbook provides information for security and privacy experts in most areas of big data including; FinTech, Industry 4.0, Internet of Things, Smart Grids, Smart Farming and more. Experts working in big data, privacy, security, forensics, malware analysis, machine learning and data analysts will find this handbook useful as a reference. Researchers and advanced-level computer science students focused on computer systems, Internet of Things, Smart Grid, Smart Farming, Industry 4.0 and network analysts will also find this handbook useful as a reference.
