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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1. Application Areas, Benefits and Research Challenges of Converging Blockchain and Machine Learning Techniques -- Chapter 2. Internet of Things and Blockchain in Healthcare: Challenges and Solutions -- Chapter 3. A Conceptual Model for the Role of Blockchain in Overcoming Supply Chain Challenges -- Chapter 4. A Hybrid application of Quantum Computing Methodologies to AI Techniques for Paddy Crop Leaf Disease Identification -- Chapter 5. Cognitive Computing for the Internet of Medical Things -- Chapter 6. Blockchain-based Privacy-preserving electronics healthcare records in healthcare 4.0 using Proxy Re-Encryption -- Chapter 7. A Framework for low energy application devices using Blockchain-Enabled IoT in WSNs -- Chapter 8. Implementation of Real-Time Water Quality Monitoring Based on Java and Internet of Things -- Chapter 9. Blockchain-Based Infrastructure for Precision Agriculture -- Chapter 10. Implementation of a Distributed Electronic Voting System Using a Blockchain-Based Framework -- Chapter 11. Blockchain based organ donation and transplant matching system -- Chapter 12. A transparent, distributed,

and secure platform for crowd funding based on blockchain technology -- Chapter 13. Certificate Authentication System Using Blockchain -- Chapter 14. Blockchain Based Decentralized Student Verification Platform -- Chapter 15. Application of Internet of Things systems for Aerosol monitoring of quarries in Morocco -- Chapter 16. Blockchain Networks for Cybersecurity Using Machine Learning Algorithms -- Chapter 17. Block Chain of Crypto-Currency Using PoW based Consensus Algorithm with SHA – 256 Hash Algorithm for Making Secured Payments -- Chapter 18. An Efficient Security Enabled Routing Protocol for Data Transmission in VANET Using blockchain Ripple protocol consensus algorithm -- Chapter 19. Blockchain-based Sinkhole Attack Detection in Wireless Sensor Network -- Chapter 20. Secured Smart Manufacturing Systems Using Blockchain Technology For Industry 4.0 -- Chapter 21. Kryptoverse – A Fully-Fledged Cryptocurrency Transfer Website Based On Web 3.0 -- Chapter 22. The Benefits of Combining AI & Blockchain in Enhancing Decision Making in Banking Industry.

Sommario/riassunto

This book discusses the convergence of artificial intelligence (AI) and Blockchain and how they can work together to help reach the goals of Industry 4.0. The authors first discuss how AI and Blockchain can help increase performance in business. The authors go on to discuss how the technologies can integrate to provide a competitive edge for businesses through improvements in big data, which has allowed firms to organize huge datasets into structured components that computers can process quickly. The authors also cover security implications and how AI and Blockchain can act as a double-edged sword against cyber-attacks. Impacts in programming, calculations, robotization, robots, and equipment are also discussed. This book caters to an extensive cross-sectional and multi-disciplinary readership. Academics, researchers and their students in topics such as artificial intelligence, cyber-physical systems, ethics, robotics, safety engineering, and safety-critical systems should find the book of value. Includes diverse perspectives on how Blockchain and artificial intelligence are converging to meet the needs of Industry 4.0; Focuses on technology trends that are helping to build a resilient society; Considers improvements in how we do business, trade, work, produce goods, learn, and seek medical services.
