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Nota di contenuto	Nature-inspired Cyber Security and Resilience: An Overview -- Detection of Reconnaissance Attacks on IoT Devices Using Deep Neural Networks -- Particle Swarm Optimization driven DSE based Low Cost Hardware Security for Securing DSP IP Cores -- Malicious Activity Detection in IoT Networks: A Nature-Inspired Approach -- Nature-inspired malware & anomaly detection in android-based systems -- A Review of Artificial Intelligence and Machine Learning Methods for Cybersecurity Applications -- A Nature Inspired DNA Encoding

Technique for Quantum Session Key Exchange Protocol -- Novel Hybridized Crow Optimization for Secure Data Transmission in Cyber Networks -- Malware attacks: Dimensions, Impact, and Defenses.

Sommario/riassunto

This book presents a comprehensive reference source for dynamic and innovative research in the field of cyber security, focusing on nature-inspired research and applications. The authors present the design and development of future-ready cyber security measures, providing a critical and descriptive examination of all facets of cyber security with a special focus on recent technologies and applications. The book showcases the advanced defensive cyber security mechanism that is a requirement in the industry and highlights measures that provide efficient and fast solutions. The authors explore the potential of AI-based and nature-inspired based computing compatibilities in establishing an adaptive defense mechanism system. The book focuses on current research while highlighting the empirical results along with theoretical concepts to provide a reference for students, researchers, scholars, professionals, and practitioners in the field of cyber security and analytics. This book features contributions from leading scholars from all over the world. Presents a comprehensive reference for innovative research in the field of cyber security and resilience with a nature-inspired focus; Presents research in artificial intelligence, machine learning, soft computing, and nature-inspired computing that can advance real-time cyber security applications; Relevant to industry professionals and researchers in cyber-security.