

1. Record Nr.	UNINA9910484096303321
Titolo	Machine intelligence and big data analytics for cybersecurity applications // Yassine Maleh [and three others], editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] Â©2021
ISBN	3-030-57024-X
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XIII, 539 p. 210 illus., 172 illus. in color.)
Collana	Studies in Computational Intelligence, , 1860-949X ; ; 919
Disciplina	006.3
Soggetti	Artificial intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Network Intrusion Detection: Taxonomy and Machine Learning Applications -- Machine Learning and Deep Learning models for Big Data Issues -- The Fundamentals and Potential for Cybersecurity of Big Data in the Modern World -- Improving Cyber-Threat Detection by Moving the Boundary around the Normal Samples -- Bayesian Networks for Online Threat Detection -- Network Intrusion Detection for TCP/IP Packets with Machine Learning Techniques -- Developing a Blockchain-based and Distributed Database-oriented Multi-Malware Detection Engine -- Classifying Common Vulnerabilities and Exposures Database Using Text Mining and Graph Theoretical Analysis -- Robust Cryptographical Applications for a Secure Wireless Network Protocol.
Sommario/riassunto	This book presents the latest advances in machine intelligence and big data analytics to improve early warning of cyber-attacks, for cybersecurity intrusion detection and monitoring, and malware analysis. Cyber-attacks have posed real and wide-ranging threats for the information society. Detecting cyber-attacks becomes a challenge, not only because of the sophistication of attacks but also because of the large scale and complex nature of today's IT infrastructures. It discusses novel trends and achievements in machine intelligence and their role in the development of secure systems and identifies open and future research issues related to the application of machine intelligence in the cybersecurity field. Bridging an important gap between machine intelligence, big data, and cybersecurity communities, it aspires to

provide a relevant reference for students, researchers, engineers, and professionals working in this area or those interested in grasping its diverse facets and exploring the latest advances on machine intelligence and big data analytics for cybersecurity applications. .

---