1. Record Nr.	UNINA9910591042103321
Titolo	Big Data Analytics and Computational Intelligence for Cybersecurity / / edited by Mariya Ouaissa, Zakaria Boulouard, Mariyam Ouaissa, Inam Ullah Khan, Mohammed Kaosar
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-031-05752-X
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (336 pages)
Collana	Studies in Big Data, , 2197-6511 ; ; 111
Disciplina	005.7 005.8
Soggetti	Engineering - Data processing Computational intelligence Big data Artificial intelligence Cooperating objects (Computer systems) Data Engineering Computational Intelligence Big Data Artificial Intelligence Cyber-Physical Systems Dades massives Seguretat informàtica Intel·ligència computacional Objectes cooperants (Sistemes informàtics) Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	New Advancements in Cybersecurity: A Comprehensive Survey -- CPSs Communication using 5G Network in the Light of Security -- A Survey on Security Aspects in RPL Protocol over IoT Network -- Analysis of Cybersecurity Risks and their Mitigation for Work-from-Home Tools and Techniques -- A Systemic Security and Privacy Review: Attacks and

Prevention Mechanisms over IoT Layers -- Software-Defined Networking Security: A Comprehensive Review.

Sommario/riassunto	This book presents a collection of state-of-the-art artificial intelligence and big data analytics approaches to cybersecurity intelligence. It illustrates the latest trends in AI/ML-based strategic defense mechanisms against malware, vulnerabilities, cyber threats, as well as proactive countermeasures. It also introduces other trending technologies, such as blockchain, SDN, and IoT, and discusses their possible impact on improving security. The book discusses the convergence of AI/ML and big data in cybersecurity by providing an overview of theoretical, practical, and simulation concepts of computational intelligence and big data analytics used in different approaches of security. It also displays solutions that will help analyze complex patterns in user data and ultimately improve productivity. This book can be a source for researchers, students, and practitioners interested in the fields of artificial intelligence, cybersecurity, data analytics, and recent trends of networks.