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Autore	Tyagi Amit Kumar
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Sommario/riassunto

AUTOMATED SECURE COMPUTING FOR NEXT-GENERATION SYSTEMS

This book provides cutting-edge chapters on machine-empowered solutions for next-generation systems for today's society. Security is always a primary concern for each application and sector. In the last decade, many techniques and frameworks have been suggested to improve security (data, information, and network). Due to rapid improvements in industry automation, however, systems need to be secured more quickly and efficiently. It is important to explore the best ways to incorporate the suggested solutions to improve their accuracy while reducing their learning cost. During implementation, the most difficult challenge is determining how to exploit AI and ML algorithms for improved safe service computation while maintaining the user's privacy. The robustness of AI and deep learning, as well as the reliability and privacy of data, is an important part of modern computing. It is essential to determine the security issues of using AI to protect systems or ML-based automated intelligent systems. To enforce them in reality, privacy would have to be maintained throughout the implementation process. This book presents groundbreaking applications related to artificial intelligence and machine learning for more stable and privacy-focused computing. By reflecting on the role of machine learning in information, cyber, and data security, Automated Secure Computing for Next-Generation Systems outlines recent developments in the security domain with artificial intelligence, machine learning, and privacy-preserving methods and strategies. To make computation more secure and confidential, the book provides ways to experiment, conceptualize, and theorize about issues that include AI and machine learning for improved security and preserve privacy in next-generation-based automated and intelligent systems. Hence, this book provides a detailed description of the role of AI, ML, etc., in automated and intelligent systems used for solving critical issues in various sectors of modern society. Audience Researchers in information technology, robotics, security, privacy preservation, and data mining. The book is also suitable for postgraduate and upper-level undergraduate students.
