Kim-Kwang Raymond Choo, Ali Dehghantanha (Eds.)

Handbook of Big Data Privacy

- One of the first handbooks that provides interdisciplinary coverage of security, privacy and forensics knowledge in the field of big data and IoT security, privacy, and forensics
- Presents an up-to-date view of existing and emerging security, privacy, and forensics challenges, research opportunities and solutions
- Introduces the technical information regarding cyber threats applicable to big data platforms and offers technical solutions to address those threats for the researcher and software developers to build automated systems that address security, trust and privacy issues in big data platforms

This handbook provides comprehensive knowledge and includes an overview of the current state-of-the-art of Big Data Privacy, with chapters written by international world leaders from academia and industry working in this field. The first part of this book offers a review of security challenges in critical infrastructure and offers methods that utilize acritical intelligence (AI) techniques to overcome those issues. It then focuses on big data security and privacy issues in relation to developments in the Industry 4.0. Internet of Things (IoT) devices are becoming a major source of security and privacy concern in big data platforms. Multiple solutions that leverage machine learning for addressing security and privacy issues in IoT environments are also discussed this handbook. The second part of this handbook is focused on privacy and security issues in different layers of big data systems. It discusses about methods for evaluating security and privacy of big data systems on network, application and physical layers. This handbook elaborates on existing methods to use data analytic and AI techniques at different layers of big data platforms to identify privacy and security attacks. The final part of this handbook is focused on analyzing cyber threats applicable to the big data environments. It offers an in-depth review of attacks applicable to big data platforms in smart grids, smart farming, FinTech, and health sectors.

1st ed. 2020, IX, 397 p. 149 illus., 141 illus. in color.

Printed book
Hardcover
139,99 € | £119.99 | $169.99
[1]149,79 € (D) | 153,99 € (A) | CHF 165,50

eBook
109,99 € | £95.50 | $129.00
[2]109,99 € (D) | 109,99 € (A) | CHF 132,00

Available from your library or springer.com/shop

MyCopy [3]
Printed eBook for just
€ | $ 24.99
springer.com/mycopy

Part of **SPRINGER NATURE**