

## Decision Making and Security Risk Management in IoT Environments – Springer Nature

Dear fellow researchers,

This book contains contemporary research that outlines and addresses security, privacy challenges, and decision-making in IoT environments. It covers a variety of subjects related to the following keywords: IoT, IIoT, security, AI, deep learning, federated learning, blockchain, privacy-preserving, intrusion detection systems, lightweight encryption techniques, distributed computing paradigms. This book compiles a collection of the most up-to-date research to offer a comprehensive overview of security and privacy-preserving approaches in IoT environments. It introduces new solutions based on machine learning to handle security challenges providing the field with a collection of recent research not already covered in the primary literature.

### TENTATIVE CHAPTERS

- IoT and IIoT: Preliminaries and Foundations
- Decision Making in IoT Environments: Review, Opportunities, and Challenges
- Security Threats, Privacy Issues, and Decision-Making Challenges in IoT Environments
- Lightweight Chaos-based Security Schemes for IoT
- Decision Making and Attack Classification using AI-based Techniques for IoT and IIoT Environments
- Deep Learning-based Intrusion Detection Systems for IoT and IIoT Environments
- Federated Learning-based Decision Making and Anomaly/Intrusion Detection in IoT Environments
- Blockchain for Privacy-Preserved Data Sharing in IoT Environments
- Privacy-Preserving Machine Learning for Securing IoT Environments
- Modern Distributed Computing Paradigms for Decision Making and Security Improvement in IoT and IIoT Ecosystems
- Countermeasures, Current Challenges, and Future Research Directions in Securing IoT and IIoT Environments

We aim to develop an excellent monograph unique in the field of IoT security, privacy-preserving, and decision-making. Academic researchers, scientists, and industry practitioners are invited to submit high quality chapter proposals for this book. We look forward to your valuable submissions with great interests.

### GUEST EDITORS

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### SUBMISSION GUIDELINES

Authors are invited to submit original manuscripts, in English. For details on how to prepare the manuscripts and style files refer to the instruction page for authors. This page also includes the latex macro packages and further instructions.

Authors should submit their original work that must not be submitted or currently under consideration for publication anywhere. Submissions of chapters for the book will be done to the EasyChair system, using the submissions link

<https://easychair.org/my/conference?conf=dmsrm2022>

Any questions about this book, please feel free to contact: [wboullila@psu.edu.sa](mailto:wboullila@psu.edu.sa)

### IMPORTANT DATES

- Full-length paper submission: June 15, 2022
- Notification of first decision: July 31, 2022
- Revised chapter submission: September 30, 2022
- Final decision: October 31, 2022
- Camera-ready: November 30, 2022

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