

Contents

Preface — V

Acknowledgments — VII

About the Editors — IX

List of contributors — XIII

Ronierison Maciel, Jean Araujo, Carlos Melo, Paulo Pereira, Jamilson Dantas,
Paulo Maciel

Impact evaluation of DDoS and Malware attack using IoT devices — 1

Anshu Bhasin, Ankita Sharma

**Understanding and implementation of machine learning using support vector
machine for efficient DDoS attack detection — 29**

Muzafer Saračević, Selver Pepić, Fadil Novalić

**Cryptographic method based on Catalan objects and enumerative chess
problem — 51**

Rohit Singh, Lalit Kumar Awasthi, K. P. Sharma

**Distributed denial-of-service attacks and mitigation in wireless sensor
networks — 67**

Maria Nenova, Georgi Iliev, Shaikh Javed Rasheed, Karuna Suryakant Bhosale

**New techniques for DDoS attacks mitigation in resource-constrained
networks — 83**

Mahesh Banerjee

**Detection and behavioral analysis of botnets using honeynets and
classification techniques — 131**

Rajeev Singh, T. P. Sharma

**Selected practical and effective techniques to combat distributed denial-of-
service (DDoS) attacks — 159**

Shikha Goswami, Govind Verma

Probability, queuing, and statistical perspective in the distributed denial-of-service attacks domain — 173

Richa Pandey, Mahesh Banerjee

Frequently used machine learning algorithm for detecting the distributed denial-of-service (DDoS) attacks — 189

Rakesh Chandra Bhadula, V.N. Kala, Amit Kumar Mishra, Deepak Kholiya

Utilization of puzzles for protection against DDoS attacks — 203

Index — 217