

Contents

Part I: Approaching Cybercrime and Cyberterrorism Research

| | |
|--|----|
| Megatrends and Grand Challenges of Cybercrime and Cyberterrorism Policy and Research | 3 |
| Bert-Jaap Koops | |
| Towards a Systematic View on Cybersecurity Ecology | 17 |
| Wojciech Mazurczyk, Szymon Drobniak and Sean Moore | |
| Challenges Priorities and Policies: Mapping the Research Requirements of Cybercrime and Cyberterrorism Stakeholders | 39 |
| Douglas Wells, Ben Brewster and Babak Akhgar | |
| A (Cyber)ROAD to the Future: A Methodology for Building Cybersecurity Research Roadmaps | 53 |
| Davide Ariu, Luca Didaci, Giorgio Fumera, Giorgio Giacinto, Fabio Roli, Enrico Frumento and Federica Freschi | |

Part II: Legal, Ethical and Privacy Considerations

| | |
|--|-----|
| Data Protection Law Compliance for Cybercrime and Cyberterrorism Research | 81 |
| Arnold Roosendaal, Mari Kert, Alison Lyle and Ulrich Gasper | |
| Non-discrimination and Protection of Fundamental Rights in Cybercrime and Cyberterrorism Research | 97 |
| Francesca Bosco, Elise Vermeersch, Vittoria Luda, Giuseppe Vaciago, Ulrich Gasper and Alison Lyle | |
| Risks Related to Illegal Content in Cybercrime and Cyberterrorism Research | 117 |
| Alison Lyle, Benn Kemp, Albena Spasova and Ulrich Gasper | |

Part III: Technologies, Scenarios and Best Practices

| | |
|--|------------|
| Cybercrime Economic Costs: No Measure No Solution | 135 |
| Jart Armin, Bryn Thompson and Piotr Kijewski | |

| | |
|--|------------|
| Towards the Development of a Research Agenda for Cybercrime and Cyberterrorism – Identifying the Technical Challenges and Missing Solutions | 157 |
| Borka Jerman-Blažič and Tomaž Klobučar | |

| | |
|--|------------|
| The Never-Ending Game of Cyberattack Attribution: Exploring the Threats, Defenses and Research Gaps | 175 |
| Piotr Kijewski, Przemysław Jaroszewski, Janusz A. Urbanowicz and Jart Armin | |

| | |
|---|------------|
| Emerging Cyber Security: Bio-inspired Techniques and MITM Detection in IoT | 193 |
| Michał Choraś, Rafał Kozik and Iwona Maciejewska | |

| | |
|--|------------|
| Cyber Situational Awareness Testing | 209 |
| Joel Brynielsson, Ulrik Franke and Stefan Varga | |

Part IV: Policy Development and Roadmaps for Cybercrime and Cyberterrorism Research

| | |
|--|------------|
| How the Evolution of Workforces Influences Cybercrime Strategies: The Example of Healthcare | 237 |
| Enrico Frumento and Federica Freschi | |

| | |
|---|------------|
| European Public-Private Partnerships on Cybersecurity - An Instrument to Support the Fight Against Cybercrime and Cyberterrorism | 259 |
| Nina Olesen | |

| | |
|---|------------|
| Are We Doing All the Right Things to Counter Cybercrime? | 279 |
| Michał Choraś, Rafał Kozik, Andrew Churchill and Artsiom Yautsiukhin | |

| | |
|---|------------|
| Consolidated Taxonomy and Research Roadmap for Cybercrime and Cyberterrorism | 295 |
| Babak Akhgar, Michał Choraś, Ben Brewster, Francesca Bosco, Elise Vermeersch, Vittoria Luda, Damian Puchalski and Douglas Wells | |

| | |
|-------------------------------|------------|
| Author Index | 323 |
|-------------------------------|------------|



<http://www.springer.com/978-3-319-38929-5>

Combatting Cybercrime and Cyberterrorism
Challenges, Trends and Priorities

Akhgar, B.; Brewster, B. (Eds.)

2016, XII, 323 p. 36 illus., Hardcover

ISBN: 978-3-319-38929-5