Table of Contents

Preface ................................................................................................................................................ xvi

Section 1  
Legal Aspects

Chapter 1  
Cloud State Surveillance: Dark Octopus Tentacle Clouds from the Atlantic ................................. 1  
    Sylvia Kierkegaard, International Association of IT Lawyers, Denmark

Chapter 2  
Data Protection in EU Law after Lisbon: Challenges, Developments, and Limitations .................. 24  
    Maria Tzanou, Keele University, UK

Chapter 3  
File-Sharing of Copyrighted Works, P2P, and the Cloud: Reconciling Copyright and Privacy Rights  
    Pedro Pina, Polytechnic Institute of Coimbra, Portugal

Chapter 4  
Dataveillance in the Workplace: Privacy Threat or Market Imperative? ....................................... 69  
    Regina Connolly, Dublin City University, Ireland

Chapter 5  
Social Engineering Techniques, Password Selection, and Health Care Legislation: A Health Care  
    Setting ........................................................................................................................................ 85  
    B. Dawn Medlin, Appalachian State University, USA  
    Joseph A. Cazier, Appalachian State University, USA

Section 2  
Identity Protection

Chapter 6  
Play That Funky Password! Recent Advances in Authentication with Music ............................... 101  
    Marcia Gibson, University of Bedfordshire, UK  
    Karen Renaud, University of Glasgow, UK  
    Marc Conrad, University of Bedfordshire, UK  
    Carsten Maple, University of Warwick, UK
Chapter 7
Privacy, Security, and Identity Theft Protection: Advances and Trends .............................................133
Guillermo A. Francia III, Jacksonville State University, USA
Frances Shannon Hutchinson, ITEL Laboratories, USA
Xavier Paris Francia, Jacksonville State University, USA

Chapter 8
Identity Management Systems: Models, Standards, and COTS Offerings .............................................144
Reema Bhatt, State University of New York – Buffalo, USA
Manish Gupta, State University of New York – Buffalo, USA
Raj Sharman, State University of New York – Buffalo, USA

Chapter 9
Vidya Mulukutla, State University of New York – Buffalo, USA
Manish Gupta, State University of New York – Buffalo, USA
H. R. Rao, State University of New York – Buffalo, USA

Section 3
Trust and Security

Chapter 10
Security and Privacy Requirements Engineering ................................................................. 199
Nancy R. Mead, Carnegie Mellon University, USA
Saeed Abu-Nimeh, Damballa Inc., USA

Chapter 11
An Information Security Model for Implementing the New ISO 27001 .............................................. 216
Margareth Stoll, Independent Researcher, Italy

Chapter 12
Health IT: A Framework for Managing Privacy Impact Assessment of Personally Identifiable Data 239
Cyril Onwubiko, Research Series Limited, UK

Chapter 13
Do We Need Security Management Systems for Data Privacy? .................................................. 263
Wolfgang Boehmer, Technische Universität Darmstadt, Germany

Chapter 14
Trust and Trust Building of Virtual Communities in the Networked Age .................................... 300
Qing Zou, McGill University, Canada
Eun G. Park, McGill University, Canada

Chapter 15
The Security, Privacy, and Ethical Implications of Social Networking Sites ................................. 329
   M. J. Warren, Deakin University, Australia
   S. Leitch, RMIT, Australia

Section 4
Detection Techniques

Chapter 16
Guidance for Selecting Data Collection Mechanisms for Intrusion Detection ......................... 340
   Ulf Larson, Ericsson AB, Sweden
   Erland Jonsson, Chalmers University of Technology, Sweden
   Stefan Lindskog, Karlstad University, Sweden

Chapter 17
An Auto-Reclosing-Based Intrusion Detection Technique for Enterprise Networks .................. 371
   Nana K. Ampah, Jacobs Engineering Group, USA
   Cajetan M. Akujuobi, Prairie View A&M University, USA

Chapter 18
A Dynamic Subspace Anomaly Detection Method Using Generic Algorithm for Streaming
Network Data .................................................................................................................................. 403
   Ji Zhang, University of Southern Queensland, Australia
   Hongzhou Li, Guilin University of Electronic Technology, China

Chapter 19
Detecting Botnet Traffic from a Single Host ................................................................................ 426
   Sebastián García, Universidad Nacional del Centro (UNICEN University), Argentina &
   Czech Technical University (CTU University), Czech Republic.
   Alejandro Zunino, Universidad Nacional del Centro (UNICEN University), Argentina
   Marcelo Campo, Universidad Nacional del Centro (UNICEN University), Argentina

Compilation of References ......................................................................................................... 447

About the Contributors ................................................................................................................ 497

Index ............................................................................................................................................. 505