Contents

Information Security Education

Cybersecurity Curricular Guidelines. ................................. 3
   Matt Bishop, Diana Burley, Scott Buck, Joseph J. Ekstrom,
   Lynn Futcher, David Gibson, Elizabeth K. Hawthorne, Siddharth Kaza,
   Yair Levy, Herbert Mattord, and Allen Parrish

Designing Degree Programmes for Bachelors and Masters
in Information Security ............................................. 14
   Natalia Miloslavskaya and Alexander Tolstoy

Assessing the Effectiveness of the Cisco Networking Academy Program
in Developing Countries ........................................... 27
   Odwa Yekela, Kerry-Lynn Thomson, and Johan van Niekerk

Pathways in Cybersecurity: Translating Theory into Practice. ......... 39
   Susanne Wetzel

Teaching Information Security

Evaluating Secure Programming Knowledge. ........................ 51
   Matt Bishop, Jun Dai, Melissa Dark, Ida Ngambeki, Phillip Nico,
   and Minghua Zhu

   Konstantin G. Kogos and Sergey V. Zapechnikov

Introducing Mobile Network Security Experiments to Communication
Technology Education ............................................. 74
   Stig F. Mjølsnes and Ruxandra F. Olimid

Information Security Awareness and Culture

A Linguistic Approach to Information Security Awareness Education
in a Healthcare Environment ...................................... 87
   Lynette Drevin, Hennie Kruger, Anna-Marie Bell, and Tjaart Steyn

Cybersecurity Culture: An Ill-Defined Problem ...................... 98
   Noluxolo Gcza and Rossouw von Solms
A Study into the Cybersecurity Awareness Initiatives for School Learners in South Africa and the UK

Elmarie Kritzinger, Maria Bada, and Jason R.C. Nurse

South African Computing Educators’ Perspectives on Information Security Behaviour

Thandolwethu Mabece, Lynn Futcher, and Kerry-Lynn Thomson

Training Information Security Professionals

ISO/IEC Competence Requirements for Information Security Professionals

Natalia Miloslavskaya and Alexander Tolstoy

Evaluating a Multi Agency Cyber Security Training Program Using Pre-post Event Assessment and Longitudinal Analysis

Erik Moore, Steven Fulton, and Dan Likarish

“Network Security Intelligence” Educational and Research Center

Natalia Miloslavskaya, Alexander Tolstoy, and Anton Migalin

Author Index

XII Contents
Information Security Education for a Global Digital Society
10th IFIP WG 11.8 World Conference, WISE 10, Rome, Italy, May 29-31, 2017, Proceedings
Bishop, M.; Futcher, L.; Miloslavskaya, N.; Theocharidou, M. (Eds.)
2017, XII, 169 p. 20 illus., Hardcover
ISBN: 978-3-319-58552-9