Table of Contents

Secure Business Intelligence Markup Language (secBIML) for the Cloud 1
Aspen Olmsted

Web Application Firewalls and Ways of Seeing Imperfect Tools 7
Andrew Zitek and Aspen Olmsted

Using Bayesian Networks to Reduce SLO Violations in a Dynamic Cloud-based Environment 14
Aspen Olmsted and Agam Dua

IoT Device IdentificAtion and RecoGnition (IoTAG) 17
Lukas Hinterberger, Sebastian Fischer, Berhard Weber, Katrin Neubauer, and Rudolf Hackenberg

A Study About the Different Categories of IoT in Scientific Publications 24
Sebastian Fischer, Katrin Neubauer, and Rudolf Hackenberg

Threat Analysis of Industrial Internet of Things Devices 31
Simon Liebl, Leah Lathrop, Ulrich Raithel, Matthias Sollner, and Andreas Assmuth

Development of a Process-oriented Framework for Security Assessment of Cyber Physical Systems 38
Katrin Neubauer and Rudolf Hackenberg

Securing the Internet of Things from the Bottom Up Using Physical Unclonable Functions 44
Leah Lathrop, Simon Liebl, Ulrich Raithel, Matthias Sollner, and Andreas Assmuth

An IoT Crypto Gateway for Resource-Constrained IoT Devices 50
Ahmed Alqattaa and Daniel Loebenberger

Reliable Fleet Analytics for Edge IoT Solutions 55
Emmanuel Raj, Magnus Westerlund, and Leonardo Espinosa-Leal

Securing the Internet of Things from the Bottom Up Using an Immutable Blockchain-Based Secure Forensic Trail 63
Bob Duncan

A Systematic Mapping Study on Edge Computing and Analytics 69
Andrei Morariu, Jonathan Shabulinzenze, Miikka Jaurola, Petteri Multanen, Kalevi Huhtala, Jerker Bjorkqvist, and Kristian Nybom

Migration of Data and Applications in the Cloud 77
Arian Kaciu and Edmond Jajaga