

Contents

Keynote Paper

- Accountability in Cloud Service Provision Ecosystems 3
Siani Pearson

Information Management and Data Privacy

- Information Classification Issues 27
Erik Bergström and Rose-Mharie Åhlfeldt
- DEICS: Data Erasure in Concurrent Software 42
Kalpana Gondi, A. Prasad Sistla, and V.N. Venkatakrishnan
- A Practical Analysis of Oblivious Sorting Algorithms for Secure
Multi-party Computation 59
Dan Bogdanov, Sven Laur, and Riivo Talviste

Cloud, Big Data and Virtualization Security

- Security of OS-Level Virtualization Technologies 77
Elena Reshetova, Janne Karhunen, Thomas Nyman, and N. Asokan
- Processing Private Queries over an Obfuscated Database Using Hidden
Vector Encryption 94
Alberto Trombetta, Giuseppe Persiano, and Stefano Braghin
- π -Cipher: Authenticated Encryption for Big Data 110
*Danilo Gligoroski, Hristina Mihajloska, Simona Samardjiska,
Håkon Jacobsen, Rune Erlend Jensen, and Mohamed El-Hadedy*
- What Would it Take for You to Tell Your Secrets to a Cloud? -
Studying Decision Factors When Disclosing Information to Cloud
Services 129
Julio Angulo, Erik Wästlund, and Johan Högberg

Network Security and Logging

- Efficient Record-Level Keyless Signatures for Audit Logs 149
Ahto Buldas, Ahto Truu, Risto Laanoja, and Rainer Gerhards
- Static Semantics of Secret Channel Abstractions 165
Marco Giunti

Browser Randomisation against Fingerprinting: A Quantitative Information Flow Approach	181
<i>Frédéric Besson, Nataliia Bielova, and Thomas Jensen</i>	

Attacks and Defenses

Attacker Profiling in Quantitative Security Assessment Based on Attack Trees	199
<i>Aleksandr Lenin, Jan Willemson, and Dyan Permata Sari</i>	
Denial-of-Service Mitigation for Internet Services	213
<i>Aapo Kalliola, Tuomas Aura, and Sanja Šćepanović</i>	
Spook in Your Network: Attacking an SDN with a Compromised OpenFlow Switch	229
<i>Markku Antikainen, Tuomas Aura, and Mikko Särelä</i>	

Security in Healthcare and Biometrics

Patients’ Privacy Protection against Insurance Companies in eHealth Systems	247
<i>Liangyu Xu and Armin B. Cremers</i>	
Segmentation and Normalization of Human Ears Using Cascaded Pose Regression	261
<i>Anika Pflug and Christoph Busch</i>	

Poster Papers

Dynamic Enforcement of Dynamic Policies	275
<i>Pablo Buiras and Bart van Delft</i>	
Availability by Design	277
<i>Roberto Vigo, Flemming Nielson, and Hanne Riis Nielson</i>	
Pareto Efficient Solutions of Attack Trees	279
<i>Zaruhi Aslanyan and Flemming Nielson</i>	
Verification of Stateful Protocols: Set-Based Abstractions in the Applied π -Calculus	281
<i>Alessandro Bruni, Sebastian Mödersheim, Flemming Nielson, and Hanne Riis Nielson</i>	
Improvement Proposal for the CryptoCloak Application	283
<i>Dijana Vukovic, Danilo Gligoroski, and Zoran Djuric</i>	
Process Tracking for Forensic Readiness	285
<i>Yi-Ching Liao and Hanno Langweg</i>	

Computationally Analyzing the ISO 9798–2.4 Authentication Protocol 287
Britta Hale and Colin Boyd

Differential Privacy and Private Bayesian Inference 289
Christos Dimitrakakis, Blaine Nelson, Aikaterini Mitrokotsa, and Benjamin I.P. Rubinstein

Event Invitations in Privacy-Preserving DOSNs: Formalization and Protocol Design 291
Guillermo Rodríguez-Cano, Benjamin Greschbach, and Sonja Buchegger

Attacks on Privacy-Preserving Biometric Authentication 293
Aysajan Abidin, Elena Pagnin, and Aikaterini Mitrokotsa

Author Index 295



<http://www.springer.com/978-3-319-11598-6>

Secure IT Systems

19th Nordic Conference, NordSec 2014, Tromsø,

Norway, October 15-17, 2014, Proceedings

Bernsmed, K.; Fischer-Hübner, S. (Eds.)

2014, XII, 296 p. 81 illus., Softcover

ISBN: 978-3-319-11598-6