# Table of Contents

Integrity Assurance for Outsourced Databases without DBMS
Modification  ................................................................. 1
   *Wei Wei and Ting Yu*

Specification and Deployment of Integrated Security Policies
for Outsourced Data .............................................................. 17
   *Anis Bhakria, Frédéric Cuppens, Nora Cuppens-Boulahia, and David Gross-Amblard*

Optimizing Integrity Checks for Join Queries in the Cloud ............. 33
   *Sabrina De Capitani di Vimercati, Sara Foresti, Sushil Jajodia,
   Stefano Paraboschi, and Pierangela Samarati*

Privacy-Enhancing Proxy Signatures from Non-interactive Anonymous Credentials ......................................................... 49
   *David Derler, Christian Hanser, and Daniel Slamanig*

Privacy-Preserving Multiple Keyword Search on Outsourced Data
in the Clouds .......................................................... 66
   *Tarik Moataz, Benjamin Justus, Indrakshi Ray,
   Nora Cuppens-Boulahia, Frédéric Cuppens, and Indrajit Ray*

Secure and Privacy-Preserving Querying of Personal Health Records in the Cloud ................................................................. 82
   *Samira Barouti, Feras Aljumah, Dima Alhadidi, and Mourad Debbabi*

Data Leakage Quantification .................................................. 98
   *Sokratis Vavilis, Milan Petkovic, and Nicola Zannone*

Toward Software Diversity in Heterogeneous Networked Systems ........ 114
   *Chu Huang, Sencun Zhu, and Robert Erbacher*

FSquaDRA: Fast Detection of Repackaged Applications ..................... 130
   *Yury Zhauniarovich, Olga Gadyatskaya, Bruno Crispo,
   Francesco La Spina, and Ermanno Moser*

‘Who, When, and Where?’ Location Proof Assertion for Mobile Devices ................................................................. 146
   *Rasib Khan, Shams Zawoad, Md Munirul Haque, and Ragib Hasan*
Design Patterns for Multiple Stakeholders in Social Computing .......................... 163

Pooya Mehregan and Philip W.L. Fong

Collaboratively Solving the Traveling Salesman Problem with Limited Disclosure .......................................................... 179

Yuan Hong, Jaideep Vaidya, Haibing Lu, and Lingyu Wang

ELITE: zEro Links Identity management systEm .............................................. 195

Tarik Moataz, Nora Cuppens-Boulahia, Frédéric Cuppens, Indrajit Ray, and Indrakshi Ray

Dynamic Workflow Adjustment with Security Constraints .............................. 211

Haibing Lu, Yuan Hong, Yanjiang Yang, Yi Fang, and Lian Duan

Consistent Query Plan Generation in Secure Cooperative Data Access .......... 227

Meixing Le, Krishna Kant, and Sushil Jajodia

Hunting the Unknown: White-Box Database Leakage Detection ....................... 243

Elisa Costante, Jerry den Hartog, Milan Petković, Sandro Etalle, and Mykola Pechenizkiy

Incremental Analysis of Evolving Administrative Role Based Access Control Policies ................................................................. 260

Silvio Ranise and Anh Truong

Mining Attribute-Based Access Control Policies from Logs ......................... 276

Zhongyuan Xu and Scott D. Stoller

Attribute-Aware Relationship-Based Access Control for Online Social Networks ................................................................. 292

Yuan Cheng, Jaehong Park, and Ravi Sandhu

Randomly Partitioned Encryption for Cloud Databases ...................................... 307

Tahmineh Sanamrad, Lucas Braun, Donald Kossmann, and Ramarathnam Venkatesan

Towards Secure Cloud Database with Fine-Grained Access Control ............. 324

Michael G. Solomon, Vaidy Sunderam, and Li Xiong

Practical Private Information Retrieval from a Time-Varying, Multi-attribute, and Multiple-Occurrence Database ................................... 339

Giovanni Di Crescenzo, Debra Cook, Allen McIntosh, and Euthimios Panagos

LPM: Layered Policy Management for Software-Defined Networks ................. 356

Wonkyu Han, Hongxin Hu, and Gail-Joon Ahn

On Minimizing the Size of Encrypted Databases ........................................... 364

Giovanni Di Crescenzo and David Shallcross
Efficient and Enhanced Solutions for Content Sharing in DRM Systems ................................................................. 373

Michal Davidson, Ehud Gudes, and Tamir Tassa

A Scalable and Efficient Privacy Preserving Global Itemset Support Approximation Using Bloom Filters .................................................. 382

Vikas G. Ashok and Ravi Mukkamala

Author Index ......................................................................................................................................................... 391