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# Future Data and Security Engineering

Third International Conference, FDSE 2016  
Can Tho City, Vietnam, November 23–25, 2016  
Proceedings

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# Preface

In this volume we present the accepted contributions for the Third International Conference on Future Data and Security Engineering (FDSE 2016). The conference took place during November 23–25, 2016, in Can Tho City, Vietnam, at Can Tho University of Technology, which is the first technical-oriented university in the Mekong Delta area. The proceedings of FDSE are published in the LNCS series by Springer. Besides DBLP and other major indexing systems, FDSE proceedings have also been indexed by Scopus and listed in the Conference Proceeding Citation Index (CPCI) of Thomson Reuters.

The annual FDSE conference is a premier forum designed for researchers, scientists, and practitioners interested in state-of-the-art and state-of-the-practice activities in data, information, knowledge, and security engineering to explore cutting-edge ideas, present and exchange their research results and advanced data-intensive applications, as well as to discuss emerging issues on data, information, knowledge, and security engineering. At the annual FDSE, the researchers and practitioners are not only able to share research solutions to problems of today’s data and security engineering themes, but also able to identify new issues and directions for future related research and development work.

The call for papers resulted in the submission of 115 papers. A rigorous and peer-review process was applied to all of them. This resulted in 27 full (including keynote speeches) and two short accepted papers (acceptance rate: 25.2 %), which were presented at the conference. Every paper was reviewed by at least three members of the international Program Committee, who were carefully chosen based on their knowledge and competence. This careful process resulted in the high quality of the contributions published within this volume. The accepted papers were grouped into the following sessions:

- Big data analytics and cloud data management
- Internet of Things and applications
- Security and privacy engineering
- Data protection and data hiding
- Advances in authentication and data access control
- Access control in NoSQL and big data
- Context-based data analysis and applications
- Emerging data management systems and applications

In addition to the papers selected by the Program Committee, four internationally recognized scholars delivered keynote speeches: “The Present and Future of Large-Scale Systems Modeling and Engineering,” presented by Prof. Dirk Draheim from Tallinn University of Technology, Estonia; “Internet of Things and Reasons Why It Is Becoming a Reality,” presented by Prof. Cong-Duc Pham from the University of Pau, LIUPPA Laboratory, France; “Knowledge Processing and Security Aspects for the Agricultural Domain,” presented by Prof. Josef Küng from Johannes Kepler University Linz, Austria;

and “Study on the Difference of Ecological Cognition Between the Real Environment and the Virtual Environment and Its Compensation,” presented by Prof. Kazuhiko Hamamoto from Tokai University, Japan. Besides, we also organized tutorials from both academic institutes as well as industrial sectors.

The success of FDSE 2016 was the result of the efforts of many people, to whom we would like to express our gratitude. First, we would like to thank all authors who submitted papers to FDSE 2016, especially the invited speakers for the keynotes and tutorials. We would also like to thank the members of the committees and external reviewers for their timely reviewing and lively participation in the subsequent discussion in order to select such high-quality papers published in this volume. Last but not least, we thank Can Tho University of Technology, and the Faculty of Computer Science and Engineering, HCMC University of Technology, for hosting and organizing FDSE 2016.

November 2016

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