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Future Data and Security Engineering

4th International Conference, FDSE 2017
Ho Chi Minh City, Vietnam, November 29 – December 1, 2017
Proceedings

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Preface

In this volume we present the accepted contributions for the 4th International Conference on Future Data and Security Engineering (FDSE 2017). The conference took place from November 29 to December 1, 2017, in Ho Chi Minh City, Vietnam, at the HCMC University of Technology, among the most famous and prestigious universities in Vietnam. 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, to 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, researchers and practitioners are able to not only share research solutions to problems of today's data and security engineering themes, but also to identify new issues and directions for future related research and development work.

The call for papers resulted in the submission of 128 papers. A rigorous peer-review process was applied to all of them. This resulted in 28 full (including keynote speeches) and seven short accepted papers (acceptance rate: 27.3%), 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 in this volume. The accepted papers were grouped into the following sessions:

- Advances in query processing and optimization
- Big data analytics and applications
- Blockchains and emerging authentication techniques
- Data engineering tools in software development
- Data protection, data hiding, and access control
- Internet of Things and applications
- Security and privacy engineering
- Social network data analytics and recommendation systems
- Emerging data management systems and applications

In addition to the papers selected by the Program Committee, four internationally recognized scholars delivered keynote speeches: "Maximizing the Information NOT Modeled in Model-Driven Organizations," presented by Professor Colin Atkinson from the University of Mannheim, Germany; "Eco Models of Distributed Systems," presented by Professor Makoto Takizawa from Hosei University, Japan; "Estimating the Assessment Difficulty of CVSS Environmental Metrics: An Experiment," presented by

Professor Fabio Massacci from University of Trento, Italy; and "IoT Sensor Technologies to Address Issues of Asean Region," presented by Professor Koichiro Ishibashi from the University of Electro-Communications, Japan.

The success of FDSE 2017 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 2017, 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 the Faculty of Computer Science and Engineering, HCMC University of Technology, for hosting and organizing FDSE 2017.

November 2017

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