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Future Data and Security Engineering

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Proceedings

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Preface

In this volume we present the accepted contributions for the 5th International Conference on Future Data and Security Engineering (FDSE 2018). The conference took place during November 28–30, 2018, in Ho Chi Minh City, Vietnam, at 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 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 in data, information, knowledge, and security engineering. At the annual FDSE, the researchers and practitioners are not only able to share research solutions to problems in 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 122 papers. A rigorous and peer-review process was applied to all of them. This resulted in 35 accepted papers (including seven short papers, acceptance rate: 28.69%) and two keynote speeches, 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:

- Security and privacy engineering
- Authentication and access control
- Big data analytics and applications
- Advanced studies in machine learning
- Deep learning and applications
- Data analytics and recommendation systems
- Internet of Things and applications
- Smart city: data analytics and security
- Emerging data management systems and applications

In addition to the papers selected by the Program Committee, five internationally recognized scholars delivered keynote speeches: "Freely Combining Partial Knowledge in Multiple Dimensions," presented by Prof. Dirk Draheim from Tallinn University of Technology, Estonia; "Programming Data Analysis Workflows for the Masses," presented by Prof. Artur Andrzejak from Heidelberg University, Germany; "Mathematical

Foundations of Machine Learning: A Tutorial," presented by Prof. Dinh Nho Hao from Institute of Mathematics, Vietnam Academy of Science and Technology; "4th Industry Revolution Technologies and Security," presented by Prof. Tai M. Chung from Sungkyunkwan University, South Korea; and "Risk-Based Software Quality and Security Engineering in Data-Intensive Environments," presented by Prof. Michael Felderer from University of Innsbruck, Austria.

The success of FDSE 2018 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 2018, 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 2018.

November 2018

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