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Future Data and Security Engineering

8th International Conference, FDSE 2021 Virtual Event, November 24–26, 2021 Proceedings



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Preface

In LNCS volume 13076 and CCIS volume 1500 we present the accepted contributions for the 8th International Conference on Future Data and Security Engineering (FDSE 2021). The conference took place during November 24–26, 2021, in an entirely virtual mode (from Ho Chi Minh City, Vietnam). The proceedings of FDSE have been published in the LNCS and CCIS series by Springer. Besides DBLP and other major indexing systems, the 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, and to discuss emerging issues on data, information, knowledge, and security engineering. At FDSE, researchers and practitioners are not only able to share research solutions to problems of today's data and security engineering themes but are also able to identify new issues and directions for future related research and development work.

The two-round call for papers resulted in the submission of 168 papers. A rigorous peer-review process was applied to all of them. This resulted in 24 accepted papers (an acceptance rate of 14.3%) and two keynote speeches for LNCS volume 13076, and 36 accepted papers (including eight short papers, an acceptance rate of 21.4%) for CCIS volume 1500, which were presented online 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 these two volumes. The accepted papers were grouped into the following sessions:

- Advances in Machine Learning for Big Data Analytics (LNCS)
- Big Data Analytics and Distributed Systems (LNCS and CCIS)
- Blockchain and Access Control (CCIS)
- Blockchain and IoT Applications (LNCS)
- Data Analytics and Healthcare Systems (CCIS)
- Machine Learning and Artificial Intelligence for Security and Privacy (LNCS)
- Security and Privacy Engineering (CCIS)
- Industry 4.0 and Smart City: Data Analytics and Security (LNCS and CCIS)
- Emerging Data Management Systems and Applications (LNCS)
- Short Papers: Security and Data Engineering (CCIS)

In addition to the papers selected by the Program Committee, four internationally recognized scholars delivered keynote speeches:

- Artur Andrzejak, Heidelberg University, Germany
- Johann Eder, Alpen-Adria-Universität Klagenfurt, Austria

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- Tai M. Chung, Sungkyunkwan University, South Korea
- Thanh Thi Nguyen, Deakin University, Australia

The success of FDSE 2021 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 2021, especially the invited speakers for the keynotes. We would also like to thank the members of the committees and additional reviewers for their timely reviewing and lively participation in the subsequent discussion in order to select such high-quality papers published in these two volumes. Last but not least, we thank the Organizing Committee members for their great support of FDSE 2021 even during the COVID-19 pandemic time.

November 2021

Tran Khanh Dang Josef Küng Tai M. Chung Makoto Takizawa

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