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Database Systems for Advanced Applications

23rd International Conference, DASFAA 2018
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Proceedings, Part I

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Preface

It is our great pleasure to present the proceedings of the 23rd International Conference on Database Systems for Advanced Applications (DASFAA). DASFAA 2018 is an annual international database conference, which showcases state-of-the-art R&D activities in database systems and their applications. It provides a forum for technical presentations and discussions among database researchers, developers, and users from academia, business, and industry.

DASFAA 2018 was held on the Gold Coast, Australia, during May 21–24, 2018. The Gold Coast is a coastal city in the state of Queensland, 66 km (41 mi) from the state capital Brisbane. With a population of 638,090 (2016), the Gold Coast is the sixth largest city in Australia. It is a major tourist destination with its sunny subtropical climate and has become widely known for its surfing beaches, high-rise-dominated skyline, theme parks, nightlife, and rainforest hinterland. It is also the major film production hub for Queensland. The Gold Coast will host the 2018 Commonwealth Games.

This year we introduced a Senior Program Committee (SPC) at DASFAA. The SPC comprised 12 distinguished leaders in the area of database systems and advanced applications: Amr El Abbadi, UC Santa Barbara, USA; K. Selcuk Candan, Arizona State University, USA; Lei Chen, Hong Kong University of Science and Technology, Hong Kong; Chengfei Liu, Swinburne University of Technology, Australia; Nikos Mamoulis, University of Ioannina/University of Hong Kong, Hong Kong; Kyuseok Shim, Seoul National University, Korea; Michalis Vazirgiannis, Ecole Polytechnique Paris, France; Xiaokui Xiao, Nanyang Technological University, Singapore; Xiaochun Yang, Northeastern University, China; Jeffrey Xu Yu, Chinese University of Hong Kong, Hong Kong; Xiaofang Zhou, University of Queensland, Australia; and Aoying Zhou, East China Normal University, China. We are grateful for the role played by the SPC and acknowledge that the SPC provided a significant level of support and expert advice in the efficient paper-reviewing process that resulted in an excellent selection of papers.

We received 360 submissions, each of which was assigned to at least three Program Committee (PC) members and one SPC member. The thoughtful discussion on each paper by the PC with facilitation and meta-review provided by the SPC resulted in the selection of 83 full research papers (acceptance ration of 23%). In addition, we included 21 short papers, six industry papers, and eight demo papers in the program. This year the dominant topics for the selected papers included learning models, graph and network data processing, and social network analysis, followed by text and data mining, recommendation, data quality and crowd sourcing, and trajectory and stream data. Selected papers also included topics relating to network embedding, sequence and temporal data processing, RDF and knowledge graphs, security and privacy, medical data mining, query processing and optimization, search and information retrieval, multimedia data processing, and distributed computing. Last but not least, the

conference program included keynote presentations by Dr. C. Mohan (IBM Almaden Research Center, San Jose, USA), Prof. Xuemin Lin (UNSW, Sydney, Australia), and Prof. Yongsheng Gao (Griffith University, Brisbane, Australia).

Four workshops were selected by the workshop co-chairs to be held in conjunction with DASFAA 2018: the 5th International Workshop on Big Data Management and Service (BDMS 2018); the 5th International Symposium on Semantic Computing and Personalization (SeCoP 2018); the Second International Workshop on Graph Data Management and Analysis (GDMA 2018); and the Third Workshop on Big Data Quality Management (BDQM 2018). The workshop papers are included in a separate volume of the proceedings also published by Springer in its *Lecture Notes in Computer Science* series.

We are grateful to the general chairs, Yanchun Zhang, Victoria University, and Rao Kotagiri, University of Melbourne, all SPC members, PC members and external reviewers who contributed their time and expertise to the DASFAA 2018 paper reviewing process. We would like to thank all the members of the Organizing Committee, and many volunteers, for their great support in the conference organization. Special thanks go to the DASFAA 2018 local Organizing Committee chair, Junhu Wang (Griffith University), for his tireless work before and during the conference. Many thanks to the authors who submitted their papers to the conference. Lastly we acknowledge the generous financial support from Griffith University, Destination Gold Coast, and Springer.

March 2018

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