Lecture Notes in Computer Science 12682

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Database Systems for Advanced Applications

26th International Conference, DASFAA 2021
Taipei, Taiwan, April 11–14, 2021
Proceedings, Part II

Springer

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ISSN 0302-9743 ISSN 1611-3349 (electronic)
Lecture Notes in Computer Science
ISBN 978-3-030-73196-0 ISBN 978-3-030-73197-7 (eBook)
https://doi.org/10.1007/978-3-030-73197-7

LNCS Sublibrary: SL3 – Information Systems and Applications, incl. Internet/Web, and HCI

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The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

Welcome to DASFAA 2021, the 26th International Conference on Database Systems for Advanced Applications, held from April 11 to April 14, 2021! The conference was originally planned to be held in Taipei, Taiwan. Due to the outbreak of the COVID-19 pandemic and the consequent health concerns and restrictions on international travel all over the world, this prestigious event eventually happens on-line as a virtual conference, thanks to the tremendous effort made by the authors, participants, technical program committee, organization committee, and steering committee. While the traditional face-to-face research exchanges and social interactions in the DASFAA community are temporarily paused this year, the long and successful history of the events, which established DASFAA as a premier research conference in the database area, continues!

On behalf of the program committee, it is our great pleasure to present the proceedings of DASFAA 2021, which includes 131 papers in the research track, 8 papers in the industrial track, 8 demo papers, and 4 tutorials. In addition, the conference program included three keynote presentations by Prof. Beng Chin Ooi from National University of Singapore, Singapore, Prof. Jiawei Han from the University of Illinois at Urbana-Champaign, USA, and Dr. Eunice Chiu, Vice President of NVIDIA, Taiwan.

The highly selective papers in the DASFAA 2021 proceedings report the latest and most exciting research results from academia and industry in the general area of database systems for advanced applications. The quality of the accepted research papers at DASFAA 2021 is extremely high, owing to a robust and rigorous double-blind review process (supported by the Microsoft CMT system). This year, we received 490 excellent submissions, of which 98 full papers (acceptance ratio of 20%) and 33 short papers (acceptance ratio of 26.7%) were accepted. The selection process was competitive and thorough. Each paper received at least three reviews, with some papers receiving as many as four to five reviews, followed by a discussion, and then further evaluated by a senior program committee (SPC) member. We, the technical program committee (TPC) co-chairs, considered the recommendations from the SPC members and looked into each submission as well as the reviews and discussions to make the final decisions, which took into account multiple factors such as depth and novelty of technical content and relevance to the conference. The most popular topic areas for the selected papers include information retrieval and search, search and recommendation techniques; RDF, knowledge graphs, semantic web, and knowledge management; and spatial, temporal, sequence, and streaming data management, while the dominant keywords are network, recommendation, graph, learning, and model. These topic areas and keywords shed light on the direction in which the research in DASFAA is moving.

Five workshops are held in conjunction with DASFAA 2021: the 1st International Workshop on Machine Learning and Deep Learning for Data Security Applications (MLDLDSA 2021), the 6th International Workshop on Mobile Data Management,

Mining, and Computing on Social Networks (Mobisocial 2021), the 6th International Workshop on Big Data Quality Management (BDQM 2021), the 3rd International Workshop on Mobile Ubiquitous Systems and Technologies (MUST 2021), and the 5th International Workshop on Graph Data Management and Analysis (GDMA 2021). 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 would like to express our sincere gratitude to all of the 43 senior program committee (SPC) members, the 278 program committee (PC) members, and the numerous external reviewers for their hard work in providing us with comprehensive and insightful reviews and recommendations. Many thanks to all the authors for submitting their papers, which contributed significantly to the technical program and the success of the conference. We are grateful to the general chairs, Christian S. Jensen, Ee-Peng Lim, and De-Nian Yang for their help. We wish to thank everyone who contributed to the proceedings, including Jianliang Xu, Chia-Hui Chang and Wen-Chih Peng (workshop chairs), Xing Xie and Shou-De Lin (industrial program chairs), Wenjie Zhang, Wook-Shin Han and Hung-Yu Kao (demonstration chairs), and Ying Zhang and Mi-Yen Yeh (tutorial chairs), as well as the organizers of the workshops, their respective PC members and reviewers.

We are also grateful to all the members of the Organizing Committee and the numerous volunteers for their tireless work before and during the conference. Also, we would like to express our sincere thanks to Chih-Ya Shen and Jen-Wei Huang (proceedings chairs) for working with the Springer team to produce the proceedings. Special thanks go to Xiaofang Zhou (DASFAA steering committee liaison) for his guidance. Lastly, we acknowledge the generous financial support from various industrial companies and academic institutes.

We hope that you will enjoy the DASFAA 2021 conference, its technical program and the proceedings!

February 2021

Wang-Chien Lee
Vincent S. Tseng
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Correction to: Database Systems for Advanced Applications. C1
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