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Database Systems for Advanced Applications

19th International Conference, DASFAA 2014
Bali, Indonesia, April 21-24, 2014
Proceedings, Part I



Springer

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ISSN 0302-9743 e-ISSN 1611-3349
ISBN 978-3-319-05809-2 e-ISBN 978-3-319-05810-8
DOI 10.1007/978-3-319-05810-8
Springer Cham Heidelberg New York Dordrecht London

Library of Congress Control Number: 2014934170

LNCS Sublibrary: SL 3 – Information Systems and Application, incl. Internet/Web and HCI

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Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

It is our great pleasure to present to you the proceedings of the 19th International Conference on Database Systems for Advanced Applications, DASFAA 2014, which was held in Bali, Indonesia. DASFAA is a well-established international conference series that provides a forum for technical presentations and discussions among researchers, developers, and users from academia, business, and industry in the general areas of database systems, web information systems, and their applications.

The call for papers attracted 257 research paper submissions with authors from 29 countries. After a comprehensive review process, where each paper received at least three reviews, the Program Committee accepted 62 of these, yielding a 24% acceptance rate. The reviewers were as geographically diverse as the authors, working in industry and academia in 27 countries. Measures aimed at ensuring the integrity of the review process were put in place. Both the authors and the reviewers were asked to identify potential conflicts of interest, and papers for which a conflict was discovered during the review process were rejected. In addition, care was taken to ensure diversity in the assignment of reviewers to papers. This year's technical program featured two new aspects: an audience voting scheme for selecting the best paper, and poster presentation of all accepted papers.

The conference program includes the presentations of four industrial papers selected from thirteen submissions by the Industrial Program Committee chaired by Yoshiharu Ishikawa (Nagoya University, Japan) and Ming Hua (Facebook Inc., USA), and it includes six demo presentations selected from twelve submissions by the Demo Program Committee chaired by Feida Zhu (Singapore Management University, Singapore) and Ada Fu (Chinese University of Hong Kong, China).

The proceedings also includes an extended abstract of the invited keynote lecture by the internationally known researcher David Maier (Portland State University, USA). The tutorial chairs, Byron Choi (Hong Kong Baptist University, China) and Sanjay Madria (Missouri University of Science and Technology, USA), organized three exciting tutorials: "Similarity-based analytics for trajectory data: theory, algorithms and applications" by Kai Zheng (University of Queensland, Australia), "Graph Mining Approaches: From Main memory to Map/reduce" by Sharma Chakravarthy (The University of Texas at Arlington, USA), and "Crowdsourced Algorithms in Data Management" by Dongwon Lee (Penn State University, USA). The panel chairs, Seung-won Hwang (Pohang University of Science and Technology, South Korea) and Xiaofang Zhou (University of Queensland, Australia), organized a stimulating panel on database systems for new hardware platforms chaired by Aoying Zhou (East China Normal University, China). This rich and attractive conference program of DASFAA 2014 is

accompanied by two volumes of Springer's *Lecture Notes in Computer Science* series.

Beyond the main conference, Shuigeng Zhou (Fudan University, China), Wook-Shin Han (Pohang University of Science and Technology, South Korea), and Nugraha Agus Sanjaya, (Universitas Udayana, Indonesia), who chaired the Workshop Committee, accepted five exciting workshops: the Second International DASFAA Workshop on Big Data Management and Analytics, BDMA; the Third International Workshop on Data Management for Emerging Network Infrastructure, DaMEN; the Third International Workshop on Spatial Information Modeling, Management and Mining, SIM³; the Second International Workshop on Social Media Mining, Retrieval and Recommendation Technologies, SMR; and the DASFAA Workshop on Uncertain and Crowdsourced Data, UnCrowd. The workshop papers are included in a separate proceedings volume also published by Springer in its *Lecture Notes in Computer Science* series.

The conference would not have been possible without the support and hard work of many colleagues. We would like to express our gratitude to the honorary conference chairs, Tok Wang Ling (National University of Singapore, Singapore) and Zainal Hasibuan (University of Indonesia, Indonesia), for their valuable advice on many aspects of organizing the conference. Our special thanks also go to the DASFAA Steering Committee for its leadership and encouragement. We are also grateful to the following individuals for their contributions to making the conference a success:

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Our heartfelt thanks go to the Program Committee members and external reviewers. We know that they are all highly skilled scientists with many demands on their time, and we greatly appreciate their efforts devoted to the timely and

Careful reviewing of all submitted manuscripts. We also thank all authors for submitting their papers to the conference. Finally, we thank all other individuals who helped make the conference program attractive and the conference successful.

April 2014

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