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Lijun Chang · Junhao Gan · Xin Cao (Eds.)

Databases Theory and Applications

30th Australasian Database Conference, ADC 2019
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Proceedings

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Preface

It is our pleasure to present to you the proceedings of the 30th Australasian Database Conference (ADC2019), which took place in Sydney, Australia. The Australasian Database Conference is an annual international forum for sharing the latest research advancements and novel applications of database systems, data-driven applications, and data analytics between researchers and practitioners from around the globe, particularly Australia and New Zealand. The mission of ADC is to share novel research solutions to problems of today's information society that fulfil the needs of heterogeneous applications and environments and to identify new issues and directions for future research and development work. ADC seeks papers from academia and industry presenting research on all practical and theoretical aspects of advanced database theory and applications, as well as case studies and implementation experiences. All topics related to database are of interest and within the scope of the conference. ADC gives researchers and practitioners a unique opportunity to share their perspectives with others interested in the various aspects of database systems.

As in previous years, the ADC 2019 Program Committee accepted papers considered as being of ADC quality without setting any predefined quota. The conference received 16 submissions and accepted ten papers, including nine full research papers and one demo paper. Each paper was peer reviewed in full by at least three independent reviewers, and in some cases four referees produced independent reviews. A conscious decision was made to select the papers for which all reviews were positive and favorable. The Program Committee that selected the papers consists of 35 members from around the globe, including Australia, China, Finland, Japan, the UK, and the USA, who were thorough and dedicated to the reviewing process.

We would like to thank all our colleagues who served on the Program Committee or acted as external reviewers. We would also like to thank all the authors who submitted their papers and the attendees. This conference is held for you, and we hope that with these proceedings, you can have an overview of this vibrant research community and its activities. We encourage you to make submissions to the next ADC conference and contribute to this community.

January 2019

Lijun Chang
Junhao Gan
Xin Cao

General Chair's Welcome Message

On behalf of the organizers and Steering Committee for ADC 2019, I am honored to welcome you to the proceedings of the conference. The Australasian Database Conference has an extensive history; this was the 30th occurrence of the conference. In the past decade, ADC has been held on the Gold Coast (2018), Brisbane (2017), Sydney (2016), Melbourne (2015), Brisbane (2014), Adelaide (2013), Melbourne (2012), Perth (2011), Brisbane (2010), Wellington (2009), and Wollongong (2008). This year, ADC was run under the umbrella of the Australasian Computer Science Week, organized at Macquarie University in Sydney.

We are especially grateful to A/Prof. Len Hamer of Macquarie University for arranging things so smoothly. The technical program was arranged by Dr. Lijun Chang (University of Sydney) and Dr. Junhao Gan (University of Melbourne), who managed the review process by a panel of distinguished researchers from many countries, and then selected the papers from 16 submissions. The proceedings publication was arranged and supervised by Dr. Xin Cao (University of New South Wales). We are all the beneficiaries of their dedication.

As well as the conference, whose papers are found here, we held a co-located workshop aimed at PhD students and early-career researchers, with a range of outstanding speakers, especially a keynote from Prof. Beng Chin Ooi (NUS). This all shows the vibrancy of the database research community in Australia and New Zealand, and contributes to its continuation.

Alan Fekete

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