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Proceedings

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Preface

It is our pleasure to present to you the proceedings of the 31th Australasian Database Conference (ADC 2020), which took place in Melbourne, Australia. ADC 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 2020 Program Committee accepted those papers to be considered as being of ADC quality without setting any predefined quota. The conference received 30 submissions and accepted 20 papers, including 14 full research papers and 6 short papers. 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, New Zealand, 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.

December 2019

Renata Borovica-Gajic
Jianzhong Qi
Weiqing Wang

General Chair's Welcome Message

On behalf of the organizers and Steering Committee for ADC 2020, I am honored to welcome you to the proceedings from the conference. The Australasian Database Conference has an extensive history; this is the 31st occurrence of the conference. In the past decade, ADC has been held in Sydney (2019), 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 structure of the Australasian Computer Science Week, organized at Swinburne University in Melbourne.

The technical program was arranged by Dr. Renata Borovica-Gajic (The University of Melbourne) and Dr. Jianzhong Qi (The University of Melbourne), who managed the review process by a panel of distinguished researchers from many countries, and then selected the papers from 30 submissions. The proceedings publication was arranged and supervised by Dr. Weiqing Wang (Monash University). We also sincerely thank the publicity chairs, Dr. Zhifeng Bao (RMIT University) and Zeyi Wen (National University of Singapore), for all their efforts. 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 Dr. Devish Srivastava (AT&T). This all shows the vibrancy of the database research community in Australia and New Zealand, and contributes to its continuation.

Best wishes to all
Chengfei Liu

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Contents

Full Research Papers

Semantic Round-Tripping in Conceptual Modelling Using Restricted Natural Language	3
<i>Bayzid Ashik Hossain and Rolf Schwitter</i>	
PAIC: Parallelised Attentive Image Captioning	16
<i>Ziwei Wang, Zi Huang, and Yadan Luo</i>	
Efficient k NN Search with Occupation in Large-Scale On-demand Ride-Hailing	29
<i>Mengqi Li, Dan He, and Xiaofang Zhou</i>	
Trace-Based Approach for Consistent Construction of Activity-Centric Process Models from Data-Centric Process Models	42
<i>Jyothi Kunchala, Jian Yu, Sira Yongchareon, and Guiling Wang</i>	
Approximate Fault Tolerance for Sensor Stream Processing	55
<i>Daiki Takao, Kento Sugiura, and Yoshiharu Ishikawa</i>	
Function Interpolation for Learned Index Structures.	68
<i>Naufal Fikri Setiawan, Benjamin I. P. Rubinstein, and Renata Borovica-Gajic</i>	
DEFINE: Friendship Detection Based on Node Enhancement	81
<i>Hanxiao Pan, Teng Guo, Hayat Dino Bedru, Qing Qing, Dongyu Zhang, and Feng Xia</i>	
Semi-supervised Cross-Modal Hashing with Graph Convolutional Networks.	93
<i>Jiasheng Duan, Yadan Luo, Ziwei Wang, and Zi Huang</i>	
Typical Snapshots Selection for Shortest Path Query in Dynamic Road Networks.	105
<i>Mengxuan Zhang, Lei Li, Wen Hua, and Xiaofang Zhou</i>	
A Survey on Map-Matching Algorithms	121
<i>Pingfu Chao, Yehong Xu, Wen Hua, and Xiaofang Zhou</i>	
Gaussian Embedding of Large-Scale Attributed Graphs	134
<i>Bhagya Hettige, Yuan-Fang Li, Weiqing Wang, and Wray Buntine</i>	

Geo-Social Temporal Top-k Queries in Location-Based Social Networks	147
<i>Ammar Sohail, Muhammad Aamir Cheema, and David Taniar</i>	
Effective and Efficient Community Search in Directed Graphs Across Heterogeneous Social Networks	161
<i>Zezhong Wang, Ye Yuan, Xiangmin Zhou, and Hongchao Qin</i>	
Entity Extraction with Knowledge from Web Scale Corpora	173
<i>Zeyi Wen, Zeyu Huang, and Rui Zhang</i>	
Short Papers	
Graph-Based Relation-Aware Representation Learning for Clothing Matching	189
<i>Yang Li, Yadan Luo, and Zi Huang</i>	
Evaluating Random Walk-Based Network Embeddings for Web Service Applications	198
<i>Olayinka Adeleye, Jian Yu, Ji Ruan, and Quan Z. Sheng</i>	
Query-Oriented Temporal Active Intimate Community Search	206
<i>Md Musfique Anwar</i>	
A Contextual Semantic-Based Approach for Domain-Centric Lexicon Expansion	216
<i>Muhammad Abulaish, Mohd Fazil, and Tarique Anwar</i>	
Data-Driven Hierarchical Neural Network Modeling for High-Pressure Feedwater Heater Group	225
<i>Jiao Yin, Mingshan You, Jinli Cao, Hua Wang, MingJian Tang, and Yong-Feng Ge</i>	
Early Detection of Diabetic Eye Disease from Fundus Images with Deep Learning.	234
<i>Rubina Sarki, Khandakar Ahmed, Hua Wang, Sandra Michalska, and Yanchun Zhang</i>	
Author Index	243