Preface

Welcome to the proceedings of the 17th International Conference on Web Information Systems Engineering (WISE 2016), held in Shanghai, China, during November 8–10, 2016. The series of WISE conferences aims to provide an international forum for researchers, professionals, and industrial practitioners to share their knowledge in the rapidly growing area of Web technologies, methodologies, and applications. The first WISE event took place in Hong Kong, China (2000). Then the trip continued to Kyoto, Japan (2001); Singapore (2002); Rome, Italy (2003); Brisbane, Australia (2004); New York, USA (2005); Wuhan, China (2006); Nancy, France (2007); Auckland, New Zealand (2008); Poznan, Poland (2009); Hong Kong, China (2010); Sydney, Australia (2011); Paphos, Cyprus (2012); Nanjing, China (2013); Thessaloniki, Greece (2014); Miami, USA (2015); and this year, WISE 2016 was held in Shanghai, China, supported by Fudan University, China.

A total of 233 research papers were submitted to the conference for consideration, and each paper was reviewed by at least three reviewers. Finally, 39 submissions were selected as full papers (with an acceptance rate of 16.7 % approximately), plus 31 as short papers. The research papers cover the areas of social network data analysis, recommender systems, topic modeling, data diversity, data similarity, context-aware recommendation, prediction, big data processing, cloud computing, event detection, data mining, sentiment analysis, ranking in social networks, microblog data analysis, query processing, spatial and temporal data, graph theory and non traditional environments.

In addition to regular and short papers, the WISE 2016 program also featured a special session on Data Quality and Trust in Big Data (QUAT-16) and a medical big data forum.

QUAT is a forum for presenting and discussing novel ideas and solutions related to the problems of exploring, assessing, monitoring, improving, and maintaining the quality of data and trust for big data. It aims to provide researchers in the areas of web technology, e-services, social networking, big data, data processing, trust, and information systems and GIS with a forum for discussing and exchanging their recent research findings and achievements. This year, the QUAT 2016 program featured eight accepted papers on data cleansing, data quality analytics, reliability assessment, and quality of service for domain applications. As the organizers of QUAT 2016, Prof. Deren Chen, Prof. William Song, Dr. Xiaolin Zheng, Dr. Johan Håansson, and Prof. Shaozhong Zhang, we would like to thank all the authors for their enthusiastic high-quality submissions, the reviewers (Program Committee members) for their careful and timely reviews, and the Organizing Committee, Dr. Roger Nyberg, Dr. Zukun Yu, Dr. Xiaofeng Du, and Dr. Xiaoyun Zhao, for their excellent publicity.

The medical big data forum aims to promote the analysis and application of big data in healthcare. Experts and companies related to the domain of big data in healthcare

were invited to present their reports in this forum. Many hot research points of big data in healthcare were discussed, including analysis and mining, application and value exploration, interoperability standards, security and privacy protection. The objective of this forum is to provide forward-looking ideas and views for research and application of big data in healthcare, which will promote the development of big data in healthcare, accelerate practical research, and facilitate the innovation and industrial development of mobile healthcare. The forum was organized by Prof. Yan Jia, Prof. Weihong Han, and Prof. Hua Wang.

We also wish to take this opportunity to thank the honorary conference chair, Prof. Maria Orlowska; the general co-chairs, Prof. Hong Mei, Prof. Marek Rusinkiewicz, and Prof. Yanchun Zhang; the program co-chairs, Prof. Wojciech Cellary, Prof. Mohamed F. Mokbel, and Prof. Jianmin Wang; the special area chairs, Prof. Xueqi Cheng, Prof. Yan Jia, and Prof. Jianhua Ma; the workshop co-chairs, Prof. Zhiguo Gong and Prof. Yong Tang; the tutorial and panel chair, Prof. Xuemin Lin; the publication co-chairs, Prof. Hua Wang and Dr. Rui Zhou; the publicity co-chairs, Dr. Jing Yang and Dr. Quan Bai; the website chair, Dr. Rui Zhou; the local arrangements chair, Prof. Shangfei Zhu; the finance co-chairs, Ms. Lanying Zhang and Ms. Irena Dzuteska; the sponsor chair, Dr. Tao Li; and the WISE society representative, Prof. Xiaofang Zhou. The editors and chairs are grateful to Ms. Sudha Subramani and Mr. Sarathkumar Rangarajan for their help in preparing the proceedings and updating the conference website.

We would like to sincerely thank our keynote and invited speakers:

– Professor Maria Orlowska, Fellow of the Australian Academy of Sciences, Vice-President of the Polish-Japanese Institute of Information Technology, former Secretary of State in the Ministry of Science and Higher Education, Poland
– Professor Binxing Fang, academician of CAE (Chinese Academy of Engineering) and the former president of BUPT (Beijing University of Posts and Telecommunications), China
– Dr. Phil Neches, Advisor, Member of National Academy of Engineering, Chairman of Foundation Ventures LLC, founder of Teradata Corporation, USA
– Professor Ramamohanarao (Rao) Kotagiri, Fellow of the Institute of Engineers Australia, Fellow of the Australian Academy Technological Sciences and Engineering, and Fellow of Australian Academy of Science, The University of Melbourne, Australia.

In addition, special thanks are due to the members of the international Program Committee and the external reviewers for the rigorous and robust reviewing process. We are also grateful to Fudan University, China, Victoria University, Australia, and the International WISE Society for supporting this conference. The WISE Organizing Committee is also grateful to the QUAT special session organizers and medical big data forum organizers for their great efforts to help promote web information system research to broader domains.

We expect that the ideas that emerged at WISE 2016 will result in the development of further innovations for the benefit of scientific, industrial, and social communities.

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