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Web Information Systems Engineering – WISE 2017

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Proceedings, Part II

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Preface

Welcome to the proceedings of the 18th International Conference on Web Information Systems Engineering (WISE 2017), held in Moscow, Russia, during October 7–11, 2017. 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, SAR 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, SAR China (2010); Sydney, Australia (2011); Paphos, Cyprus (2012); Nanjing, China (2013); Thessaloniki, Greece (2014); Miami, USA (2015); Shanghai, China (2016); and this year, WISE 2017 was held in Moscow, Russia, supported by the Institute of Computing for Physics and Technology and the Moscow Institute of Physics and Technology, Russia.

A total of 196 research papers were submitted to the conference for consideration, and each paper was reviewed by at least three reviewers. Finally, 49 submissions were selected as full papers (with an acceptance rate of 25% approximately) plus 24 as short papers. The research papers cover the areas of microblog data analysis, social network data analysis, data mining, pattern mining, event detection, cloud computing, query processing, spatial and temporal data, graph theory, crowdsourcing and crowdsensing, Web data model, language processing and Web protocols, Web-based applications, data storage and generator, security and privacy, sentiment analysis, and recommender systems.

In addition to regular and short papers, the WISE 2017 program also featured a special session on “Security and Privacy.” The special session is a forum for presenting and discussing novel ideas and solutions related to the problems of security and privacy. Experts and companies were invited to present their reports in this forum. The objective of this forum is to provide forward-looking ideas and views for research and application of security and privacy, which will promote the development of techniques in security and privacy, and further facilitate the innovation and industrial development of big data. The forum was organized by Prof. Xiangliang Zhang, Prof. Fedor Dzerzhinskiy, Prof. Weijia Jia, and Prof. Hua Wang.

We also wish to take this opportunity to thank the honorary the general co-chairs, Prof. Stanislav V. Klimenko, Prof. Qing Li; the program co-chairs, Prof. Athman Bouguettaya, Prof. Yunjun Gao, and Prof. Andrey Klimenko; the local arrangements chair, Prof. Maria Berberova; the special area chairs, Prof. Xiangliang Zhang, Prof. Fedor Dzerzhinskiy, Prof. Weijia Jia, and Prof. Hua Wang; the workshop co-chairs, Prof. Reynold C.K. Cheng and Prof. An Liu; the tutorial and panel chair, Prof. Wei Wang; the publication chair, Dr. Lu Chen; the publicity co-chairs, Prof. Jiannan Wang, Prof. Bin Yao, and Prof. Daria Marinina; the website co-chairs, Mr. Rashid Zalyalov,

Mr. Ravshan Burkhanov, and Mr. Boris Strelnikov; the WISE Steering Committee representative, Prof. Yanchun Zhang. The editors and chairs are grateful to Ms. Sudha Subramani and Mr. Sarathkumar Rangarajan for their help with preparing the proceedings and updating the conference website.

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

- Professor Beng Chin Ooi, Fellow of the ACM, IEEE, and Singapore National Academy of Science (SNAS), NGS faculty member and Director of Smart Systems Institute, National University of Singapore, Singapore
- Professor Lei Chen, Department of Computer Science and Engineering, Hong Kong University, Hong Kong, SAR China
- Professor Jie Lu, Associate Dean (Research Excellence) in the Faculty of Engineering and Information Technology, University of Technology Sydney, Sydney, Australia

In addition, special thanks are due to the members of the international Program Committee and the external reviewers for a rigorous and robust reviewing process. We are also grateful to the Moscow Institute of Physics and Technology, Russia, the Institute of Computing for Physics and Technology, Russia, City University of Hong Kong, SAR China, University of Sydney, Australia, Zhejiang University, China, Victoria University, Australia, University of New South Wales, Australia, and the International WISE Society for supporting this conference. The WISE Organizing Committee is also grateful to the special session organizers for their great efforts to help promote Web information system research to a broader audience.

We expect that the ideas that emerged at WISE 2017 will result in the development of further innovations for the benefit of scientific, industrial, and social communities.

October 2017

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