

# Preface

Welcome to the proceedings of the 16th International Conference on Web Information Systems Engineering (WISE 2015), held in Miami, Florida, USA, in November 2015. 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); and Thessaloniki, Greece (2014). This year, for a second time, WISE was held in North America, in Miami, supported by Florida International University (FIU).

WISE 2015 hosted several well-known keynote and invited speakers. Moreover, two tutorials were presented on the topics of building secure Web systems and accessing the Princeton Wordnet.

A total of 171 research papers were submitted to the conference for consideration, and each paper was reviewed by at least two reviewers. Finally, 53 submissions were selected as full papers (with an acceptance rate of 31 % approximately), plus 17 as short papers. The research papers cover the areas of big data techniques and applications, deep/hidden Web, integration of Web and Internet, linked open data, the Semantic Web, social network computing, social Web and applications, social Web models, analysis and mining, Web-based applications, Web-based business processes and Web services, Web data Integration and mashups, Web data models, Web information retrieval, Web privacy and security, Web-based recommendations, and Web search.

In addition to regular and short papers, the WISE 2015 program also featured three special sessions, including a special session on Data Quality and Trust in Big Data (QUAT 2015), a special session on Decentralized Social Networks (DeSN 2015), and an invited session.

QUAT is a qualified 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 provides a forum for researchers in the areas of Web technology, e-services, social networking, big data, data processing, trust, and information systems and GIS to discuss and exchange their recent research findings and achievements. This year, the QUAT 2015 program featured six accepted papers on data cleansing, data quality analytics, reliability assessment, and quality of service for domain applications. QUAT 2015 was organized by Prof. Deren Chen, Prof. William Song, Dr. Xiaolin Zheng, and Dr. Johan Håkansson.

The goal of DeSN 2015 was to serve as a forum for researchers or professionals from both academia and industry to exchange new ideas, discuss new solutions, and

share their experience in the design, implementation, analysis, experimentation, or measurement related to decentralized social networks. The DeSN 2015 program included two invited speakers, Dr. Sarunas Girdzijauskas and Dr. Bogdan Carbutar, and three accepted papers. The DESN 2015 co-chairs included Dr. Antoine Boutet, Dr. Sarunas Girdzijauskas, and Dr. Frederique Laforest.

The invited session included five research papers from leading research groups. Each invited paper featured a specific domain, with five papers covering recommender systems, demand trend prediction in cloud computing, deep learning, database security, and social network privacy.

We wish to take this opportunity to thank the honorary co-chairs, Prof. S.S. Iyengar and Prof. Marek Rusinkiewicz; the tutorial and panel co-chairs, Prof. Guandong Xu and Prof. Mitsunori Ogiwara; the WISE challenge program co-chairs, Prof. Weining Qian and Qiulin Yu; the workshop co-chairs, Prof. Hill Zhu and Prof. Yicheng Tu; the publication chair, Prof. Hua Wang; the Local Organizing Committee co-chairs, Mr. Carlos Cabrera and Ms. Catherine Hernandez; the publicity co-chairs, Prof. Mark Finlayson, Prof. Giovanni Pilato, and Prof. Yanfang Ye; the registration chair, Mr. Steve Luis; the financial co-chairs, Ms. Lian Zhang and Ms. Donaley Dorsett; and the WISE society representative, Prof. Xiaofang Zhou. The editors and chairs are grateful to the website and social media masters, Mr. Steve Luis and Mr. Bin Xia, for their continuous active support and commitment, and Dr. Rui Zhou and Ms. Sudha Subramani for their effort in preparing the proceedings.

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 School of Computing and Information Sciences of Florida International University 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 broader domains.

We expect that the ideas that have emerged in WISE 2015 will result in the development of further innovations for the benefit of scientific, industrial, and societal communities.

November 2015

Jianyong Wang  
Wojciech Cellary  
Dingding Wang  
Hua Wang  
Shu-Ching Chen  
Tao Li  
Yanchun Zhang

Web Information Systems Engineering – WISE 2015

16th International Conference, Miami, FL, USA,

November 1-3, 2015, Proceedings, Part II

Wang, J.; Cellary, W.; Wang, D.; Wang, H.; Chen, S.-C.; Li,  
T.; Zhang, Y. (Eds.)

2015, XVIII, 508 p. 190 illus. in color., Softcover

ISBN: 978-3-319-26186-7