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Web and Big Data

First International Joint Conference, APWeb-WAIM 2017
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Proceedings, Part II

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China

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Preface

This volume (LNCS 10366) and its companion volume (LNCS 10367) contain the proceedings of the first Asia-Pacific Web (APWeb) and Web-Age Information Management (WAIM) Joint Conference on Web and Big Data, called APWeb-WAIM. This new joint conference aims to attract participants from different scientific communities as well as from industry, and not merely from the Asia Pacific region, but also from other continents. The objective is to enable the sharing and exchange of ideas, experiences, and results in the areas of World Wide Web and big data, thus covering Web technologies, database systems, information management, software engineering, and big data. The first APWeb-WAIM conference was held in Beijing during July 7–9, 2017.

As a new Asia-Pacific flagship conference focusing on research, development, and applications in relation to Web information management, APWeb-WAIM builds on the successes of APWeb and WAIM: APWeb was previously held in Beijing (1998), Hong Kong (1999), Xi'an (2000), Changsha (2001), Xi'an (2003), Hangzhou (2004), Shanghai (2005), Harbin (2006), Huangshan (2007), Shenyang (2008), Suzhou (2009), Busan (2010), Beijing (2011), Kunming (2012), Sydney (2013), Changsha (2014), Guangzhou (2015), and Suzhou (2016); and WAIM was held in Shanghai (2000), Xi'an (2001), Beijing (2002), Chengdu (2003), Dalian (2004), Hangzhou (2005), Hong Kong (2006), Huangshan (2007), Zhangjiajie (2008), Suzhou (2009), Jiuzhaigou (2010), Wuhan (2011), Harbin (2012), Beidaihe (2013), Macau (2014), Qingdao (2015), and Nanchang (2016). With the fast development of Web-related technologies, we expect that APWeb-WAIM will become an increasingly popular forum that brings together outstanding researchers and developers in the field of Web and big data from around the world.

The high-quality program documented in these proceedings would not have been possible without the authors who chose APWeb-WAIM for disseminating their findings. Out of 240 submissions to the research track and 19 to the demonstration track, the conference accepted 44 regular (18%), 32 short research papers, and ten demonstrations. The contributed papers address a wide range of topics, such as spatial data processing and data quality, graph data processing, data mining, privacy and semantic analysis, text and log data management, social networks, data streams, query processing and optimization, topic modeling, machine learning, recommender systems, and distributed data processing.

The technical program also included keynotes by Profs. Sihem Amer-Yahia (National Center for Scientific Research, CNRS, France), Masaru Kitsuregawa (National Institute of Informatics, NII, Japan), and Mohamed Mokbel (University of Minnesota, Twin Cities, USA) as well as tutorials by Prof. Reynold Cheng (The University of Hong Kong, SAR China), Prof. Guoliang Li (Tsinghua University, China), Prof. Arijit Khan (Nanyang Technological University, Singapore), and

Prof. Yu Zheng (Microsoft Research Asia, China). We are grateful to these distinguished scientists for their invaluable contributions to the conference program.

As a new joint conference, teamwork is particularly important for the success of APWeb-WAIM. We are deeply thankful to the Program Committee members and the external reviewers for lending their time and expertise to the conference. Special thanks go to the local Organizing Committee led by Jun He, Yongxin Tong, and Shimin Chen. Thanks also go to the workshop co-chairs (Matthias Renz, Shaoxu Song, and Yang-Sae Moon), demo co-chairs (Sebastian Link, Shuo Shang, and Yoshiharu Ishikawa), industry co-chairs (Chen Wang and Weining Qian), tutorial co-chairs (Andreas Züfle and Muhammad Aamir Cheema), sponsorship chair (Junjie Yao), proceedings co-chairs (Xiang Lian and Xiaochun Yang), and publicity co-chairs (Hongzhi Yin, Lei Zou, and Ce Zhang). Their efforts were essential to the success of the conference. Last but not least, we wish to express our gratitude to the Webmaster (Zhao Cao) for all the hard work and to our sponsors who generously supported the smooth running of the conference.

We hope you enjoy the exciting program of APWeb-WAIM 2017 as documented in these proceedings.

June 2017

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