# Lecture Notes in Artificial Intelligence

7302

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# Advances in Knowledge Discovery and Data Mining

16th Pacific-Asia Conference, PAKDD 2012 Kuala Lumpur, Malaysia, May 29 – June 1, 2012 Proceedings, Part II



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## **Preface**

PAKDD 2012 was the 16th conference of the Pacific Asia Conference series on Knowledge Discovery and Data Mining. For the first time, the conference was held in Malaysia, which has a vibrant economy and an aspiration to transform itself into a knowledge-based society. Malaysians are also known to be very active in social media such as Facebook and Twitter. Many private companies and government agencies in Malaysia are already adopting database and data warehousing systems, which over time will accumulate massive amounts of data waiting to be mined. Having PAKDD 2012 organized in Malaysia was therefore very timely as it created a good opportunity for the local data professionals to acquire cutting-edge knowledge in the field through the conference talks, tutorials and workshops.

The PAKDD conference series is a meeting place for both university researchers and data professionals to share the latest research results. The PAKDD 2012 call for papers attracted a total of 241 submissions from 32 countries in all six continents (Asia, Europe, Africa, North America, South America, and Australasia), of which 20 (8.3%) were accepted for full presentation and 66 (27.4%) were accepted for short presentation. Each submitted paper underwent a rigorous double-blind review process and was assigned to at least four Program Committee (PC) members. Every paper was reviewed by at least three PC members, with nearly two-thirds of them receiving four reviews or more. One of the changes in the review process this year was the adoption of a two-tier approach, in which a senior PC member was appointed to oversee the reviews for each paper. In the case where there was significant divergence in the review ratings, the senior PC members also initiated a discussion phase before providing the Program Cochairs with their final recommendation. The Program Co-chairs went through each of the senior PC members' recommendations, as well as the submitted papers and reviews, to come up with the final selection. We thank all reviewers (Senior PC, PC and external invitees) for their efforts in reviewing the papers in a timely fashion (altogether, more than 94% of the reviews were completed by the time the notification was sent). Without their hard work, we would not have been able to see such a high-quality program.

The three-day conference program included three keynote talks by world-renowned data mining experts, namely, Chandrakant D. Patel from HP Labs (Joules of Available Energy as the Global Currency: The Role of Knowledge Discovery and Data Mining); Charles Elkan from the University of California at San Diego (Learning to Make Predictions in Networks); and Ian Witten from the University of Waikato (Semantic Document Representation: Do It with Wikification). The program also included four workshops, three tutorials, a doctoral symposium, and several paper sessions. Other than these intellectually inspiring events, participants of PAKDD 2012 were able to enjoy several social events

throughout the conference. These included a welcome reception on day one, a banquet on day two and a free city tour on day three. Finally, PAKDD 2012 organized a data mining competition for those who wanted to lay their hands on mining some real-world datasets.

Putting a conference together with a scale like PAKDD 2012 requires tremendous efforts from the organizing team as well as financial support from the sponsors. We thank Takashi Washio, Jun Luo and Hui Xiong for organizing the workshops and tutorials, and coordinating with the workshop/tutorial organizers/speakers. We also owe James Bailey a big thank you for preparing the conference proceedings. Finally, we had a great team of Publicity Co-chairs, Local Organization Co-chairs, and helpers. They ensured the conference attracted many local and international participants, and the conference program proceeded smoothly.

We would like to express our gratitude to SAS, AFOSR/AOARD (Air Force Office of Scientific Research/Asian Office of Aerospace Research and Development), MDeC (Multimedia Development Corporation), PIKOM (Computer Industry Association of Malaysia) and other organizations for their generous sponsorhip and support. We also wish to thank the PAKDD Steering Committee for offering the student travel support grant and the grant for the best student paper award(s), and UTAR and MMU for providing the administrative support.

Philip Yu Ee-Peng Lim Hong-Tat Ewe Pang-Ning Tan Sanjay Chawla Chin-Kuan Ho

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