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Preface

The Knowledge Technology Week (KTW) is the premier platform for researchers and practitioners of artificial intelligence and semantic technology in Malaysia. The KTW series aims at stimulating research by promoting the exchange and cross-fertilization of ideas among different branches of artificial intelligence and semantic technology. It also provides a common forum for researchers and practitioners in various fields of artificial intelligence and semantic technology to exchange new ideas and share their experience. KTW 2011 was held in Kajang, Malaysia, hosted by the College of Information Technology (COIT), Universiti Tenaga Nasional (UNITEN) on the Putrajaya Campus.

KTW 2011 consisted of the following co-located events:

- Conferences:
  - Third Malaysian Joint Conference on Artificial Intelligence (MJCAI 2011)
  - Third Semantic Technology and Knowledge Engineering Conference (STAKE 2011)
- Workshops:
  - International Workshop on Semantic Agents (IWSA 2011)
  - Workshop on Semantic Augmented Reality (WSAR 2011)
  - Workshop on Blended Learning in Higher Education and the Workplace: Tools, Practices and Experiences (WBL 2011)
- Tutorials:
  - Hybrid Metaheuristic, from Optimization to Modeling by Bong Chin Wei
  - Prolog Rule Language for Semantic Technology by Sheng-Chuan Wu
  - Setting up a Linked Open Data Infrastructure by Johannes Keizer
  - Knowledge Design Patterns by John Sowa
  - Searching, Orienteering and Finding by Andreas Dengel
  - Building Multi-Agent Systems Using Win-Prolog by Mohd Sharifuddin Ahmad
- Other Events:
  - Poster Sessions
  - PhD Students Symposium
  - Artificial Intelligence Software Demonstration
  - Artificial Intelligence Special Sessions on Agriculture, Econmics, Health and Medical Education.

This volume contains selected papers from the proceedings of the Third Malaysian Joint Conference on Artificial Intelligence (MJCAI 2011), the Third Semantic Technology and Knowledge Engineering (STAKE 2011), and the International Workshop on Semantic Agents (IWSA 2012). KTW 2011 received a total of 105 submission from seven countries. From these, 29 regular papers (28%) and nine short papers (9%) were accepted for publication in this

volume. We also included five invited papers from the keynote speakers. All submitted papers were referred by three or more reviewers selected by the Program Committee members. The reviewers' evaluations and comments were carefully examined by the core members of the Program Committee to ensure fairness and consistency in the paper selection. After the conference, another round of paper revision and review was conducted to ensure all comments during the presentation of the paper was taken into account and incorporated in the final version of the papers.

The technical program comprised two days of workshops and tutorials, followed by paper, poster and demo sessions, invited talks, and three special sessions. The keynote speakers of KTW 2011 were:

- Andreas Dengel, Scientific Director, German Research Center for Artificial Intelligence (DFKI) Germany
- John Sowa, President, VivoMind Intelligence Inc., USA
- Dietrich Albert, Professor of Psychology, University of Graz, Austria
- Sheng-Chuan Wu, Vice President, Franz Inc. USA
- Klaus Tochtermann, Director of Leibniz Information Center for Economics, Kiel, Germany
- Johannes Keizer, Office of Knowledge Exchange, Research and Extension, Food and Agriculture Organization of the United Nation (FAO)
- Eric Tsui, Associate Director, Knowledge Management Research Center, The Hong Kong Polytechnic University, Hong Kong
- Erich Weichselgartner, Deputy Scientific Director, Leibniz Center for Psychological Information and Documentation, Trier, Germany

The success of a conference depends on the support and cooperation of many people and organizations; KTW 2011 was no exception. KTW 2011 was supported by the Ministry of Science, Technology and Innovation (MOSTI), MIMOS Berhad, Universiti Tenaga Nasional, Leibniz Information Centre for Economics, Franz Inc., Sabah Economic Development and Investment Authority, Infovalley Sdn. Bhd., and NOTA ASIA Sdn. Bhd.

We would like to take this opportunity to thank the authors, the Program Committee members, reviewers, and fellow members of the various Conference and Workshop Committees for their time and efforts spent in making KTW 2011 a successful and enjoyable conference.

Finally, we thank Springer, its computer science editor, Alfred Hofmann, Anna Kramer and Leonie Kunz, for their assistance in publishing the KTW 2011 proceedings as a volume in the *Communications in Computer and Information Science* series.

July 2011

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