

# Preface

ACIIDS 2016 was the eighth event of the series of international scientific conferences for research and applications in the field of intelligent information and database systems. The aim of ACIIDS 2016 was to provide an internationally respected forum for scientific research in the technologies and applications of intelligent information and database systems. ACIIDS 2016 was co-organized by the Vietnam–Korea Friendship Information Technology College (Vietnam) and Wrocław University of Technology (Poland) in co-operation with IEEE SMC Technical Committee on Computational Collective Intelligence, Bina Nusantara University (Indonesia), Ton Duc Thang University (Vietnam), and Quang Binh University (Vietnam). It took place in Da Nang (Vietnam) during March 14–16, 2016.

The ACIIDS conference series is well established. The first two events, ACIIDS 2009 and ACIIDS 2010, took place in Dong Hoi City and Hue City in Vietnam, respectively. The third event, ACIIDS 2011, took place in Daegu (Korea), while the fourth event, ACIIDS 2012, took place in Kaohsiung (Taiwan). The fifth event, ACIIDS 2013, was held in Kuala Lumpur in Malaysia, while the sixth event, ACIIDS 2014, was held in Bangkok, Thailand. The last event, ACIIDS 2015, took place in Bali (Indonesia).

We received papers from 36 countries all over the world. Each paper was peer reviewed by at least two members of the international Program Committee and international reviewer board. Only 153 papers with the highest quality were selected for oral presentation and publication in the two-volume proceedings of ACIIDS 2016.

Papers included in the proceedings cover the following topics: knowledge engineering and the Semantic Web, social networks and recommender systems, text processing and information retrieval, database systems and software engineering, intelligent information systems, decision support and control systems, machine learning and data mining, computer vision techniques, intelligent big data exploitation, cloud and network computing, multiple model approach to machine learning, advanced data mining techniques and applications, computational intelligence in data mining for complex problems, collective intelligence for service innovation, technology opportunity, e-learning and fuzzy intelligent systems, analysis of image, video, and motion data in life sciences, real-world applications in engineering and technology, ontology-based software development, intelligent and context systems, modeling and optimization techniques in information systems, database systems, and industrial systems, smart pattern processing for sports, and intelligent services for smart cities.

Accepted and presented papers highlight the new trends and challenges of intelligent information and database systems. The presenters showed how new research could lead to novel and innovative applications. We hope you will find these results useful and inspiring for your future research.

We would like to extend our heartfelt thanks to Mr. Jarosław Gowin, the Deputy Prime Minister of the Republic of Poland and Minister of Science and Higher Education for his support and honorary patronage over the conference.

We would like to express our sincere thanks to the honorary chairs, Mr. Minh Hong Nguyen (Deputy Minister of Information and Communications, Vietnam), and Prof. Tadeusz Więckowski (Rector of the Wrocław University of Technology, Poland) for their support.

Our special thanks go to the program chairs, special session chairs, organizing chairs, publicity chairs, liaison chairs, and local Organizing Committee for their work for the conference. We sincerely thank all members of the international Program Committee for their valuable efforts in the review process, which helped us to guarantee the highest quality of the selected papers for the conference. We cordially thank the organizers and chairs of special sessions, who essentially contributed to the success of the conference.

We also would like to express our thanks to the keynote speakers (Prof. Tzung-Pei Hong, Prof. Saeid Nahavandi, Prof. Jun Wang, and Prof. Piotr Wierzchoń) for their interesting and informative talks of world-class standard.

We cordially thank our main sponsors, Vietnam–Korea Friendship Information Technology College (Vietnam), Wrocław University of Technology (Poland), IEEE SMC Technical Committee on Computational Collective Intelligence, Bina Nusantara University (Indonesia), Ton Duc Thang University (Vietnam), and Quang Binh University (Vietnam). Our special thanks are due to Springer for publishing the proceedings, and all our other sponsors for their kind support.

We wish to thank the members of the Organizing Committee for their very substantial work and the members of the local Organizing Committee for their excellent work.

We cordially thank all the authors for their valuable contributions and other participants of this conference. The conference would not have been possible without their input.

Thanks are also due to many experts who contributed to making the event a success.

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