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Intelligent Information and Database Systems

11th Asian Conference, ACIIDS 2019
Yogyakarta, Indonesia, April 8–11, 2019
Proceedings, Part II
Preface

ACIIDS 2019 was the 11th event in a series of international scientific conferences on research and applications in the field of intelligent information and database systems. The aim of ACIIDS 2019 was to provide an international forum of research workers with scientific background on the technology of intelligent information and database systems and its various applications. The ACIIDS 2019 conference was co-organized by BINUS University (Indonesia) and Wroclaw University of Science and Technology (Poland) in co-operation with the IEEE SMC Technical Committee on Computational Collective Intelligence, European Research Center for Information Systems (ERCIS), University of Newcastle (Australia), Yeungnam University (South Korea), Leiden University (The Netherlands), Universiti Teknologi Malaysia (Malaysia), Quang Binh University (Vietnam), Ton Duc Thang University (Vietnam), and Vietnam National University, Hanoi (Vietnam). It took place in Yogyakarta in Indonesia during April 8–11, 2019.

The ACIIDS conference series is already 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 (South Korea), followed by the fourth event, ACIIDS 2012, 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 in Thailand. The seventh event, ACIIDS 2015, took place in Bali (Indonesia), followed by the eighth event, ACIIDS 2016, in Da Nang (Vietnam). The ninth event, ACIIDS 2017, was organized in Kanazawa (Japan). The 10th jubilee conference, ACIIDS 2018, was held in Dong Hoi City (Vietnam).

For this edition of the conference, we received more than 300 papers from 38 countries all over the world. Each paper was peer-reviewed by at least two members of the international Program Committee and the international reviewer board. Only 124 papers with the highest quality were selected for an oral presentation and publication in these two volumes of the ACIIDS 2019 proceedings.

Papers included in the proceedings cover the following topics: knowledge engineering and Semantic Web; text processing and information retrieval; machine learning and data mining; decision support and control systems; computer vision techniques; databases and intelligent information systems, collective intelligence for service innovation, technology management, e-learning and fuzzy intelligent systems, data structures modelling for knowledge representation, advanced data mining techniques and applications; intelligent information systems; intelligent methods and artificial intelligence for biomedical decision support systems, intelligent and contextual systems, intelligent systems and algorithms in information sciences, intelligent supply chains and e-commerce, sensor networks and internet of things, analysis of image, video, movements and brain intelligence in life sciences, computer vision and intelligent systems.
The accepted and presented papers focus on new trends and challenges facing the intelligent information and database systems community. The presenters showed in what way research work could stimulate novel and innovative applications. We hope you will find these results useful and inspiring for your future research work.

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

We would like to express our sincere thanks to the CEO of Bina Nusantara Group, Ir Bernard Gunawan, honorary chairs, Prof. Harjanto Prabowo (Rector of BINUS University, Indonesia), and Prof. Cezary Madryas (Rector of Wrocław University of Science and 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 the 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 contributed to the success of the conference.

We would like to express our thanks to the keynote speakers: Prof. Stephan Chalup from the University of Newcastle, Australia, Prof. Hamido Fujita from Iwate Prefectural University, Japan, Prof. Tokuro Matsuo from Advanced Institute of Industrial Technology, Japan, Prof. Michał Woźniak from Wrocław University of Science and Technology, Poland, and Dr. Alfred Budiman, CEO of Samsung R&D Indonesia (SRIN), for their world-class plenary speeches.

We cordially thank our main sponsors, BINUS University (Indonesia), Wrocław University of Science and Technology (Poland), IEEE SMC Technical Committee on Computational Collective Intelligence, European Research Center for Information Systems (ERCIS), University of Newcastle (Australia), Yeungnam University (South Korea), Leiden University (The Netherlands), Universiti Teknologi Malaysia (Malaysia), Quang Binh University (Vietnam), Ton Duc Thang University (Vietnam), and Vietnam National University, Hanoi (Vietnam). Our special thanks are due also to Springer for publishing the proceedings and sponsoring awards, and to all the other sponsors for their kind support.

We wish to thank the members of the Organizing Committee for their excellent work and the members of the local Organizing Committee for their considerable effort. We cordially thank all the authors, for their valuable contributions, and the other participants of this conference. The conference would not have been possible without their support. Thanks are also due to many experts who contributed to making the event a success.

April 2019

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