Ngoc Thanh Nguyen · Tien Khoa Tran ·
Ualsher Tukayev · Tzung-Pei Hong ·
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14th Asian Conference, ACIIDS 2022
Ho Chi Minh City, Vietnam, November 28–30, 2022
Proceedings, Part I

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Preface

ACIIDS 2022 was the 14th 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 2022 was to provide an international forum for research with scientific backgrounds in the technology of intelligent information and database systems and its various applications. The ACIIDS 2022 conference was co-organized by the International University - Vietnam National University HCMC (Vietnam) and the Wrocław University of Science and Technology (Poland) in cooperation with the IEEE SMC Technical Committee on Computational Collective Intelligence, the European Research Center for Information Systems (ERCIS), Al-Farabi Kazakh National University (Kazakhstan), the University of Newcastle (Australia), Yeungnam University (South Korea), Quang Binh University (Vietnam), Leiden University (The Netherlands), Universiti Teknologi Malaysia (Malaysia), Nguyen Tat Thanh University (Vietnam), BINUS University (Indonesia), the Committee on Informatics of the Polish Academy of Sciences (Poland) and Vietnam National University, Hanoi (Vietnam). ACIIDS 2022 was scheduled to be held in Almaty, Kazakhstan, during June 6–9, 2022. However, due to the unstable political situation, the conference was moved to Ho Chi Minh City, Vietnam, and was conducted as a hybrid event during 28–30 November 2022.

The ACIIDS conference series is already well established, having taken place at various locations throughout Asia (Vietnam, South Korea, Taiwan, Malaysia, Thailand, Indonesia, and Japan) since 2009. The 12th and 13th events were planned to take place in Phuket (Thailand). However, the global COVID-19 pandemic resulted in both editions of the conference being held online in virtual space. We were, therefore, pleased to be able to hold ACIIDS 2022 in person, whilst still providing an option for people participate online.

These two volumes contain 113 peer-reviewed papers selected for presentation from 406 submissions, with each submission receiving at least 3 reviews in a single-blind process. Papers included in this volume cover the following topics: data mining and machine learning methods, advanced data mining techniques and applications, intelligent and contextual systems, natural language processing, network systems and applications, computational imaging and vision, decision support and control systems, and data modeling and processing for Industry 4.0.

The accepted and presented papers focus on new trends and challenges facing the intelligent information and database systems community. The presenters at ACIIDS 2022 showed how research work could stimulate novel and innovative applications. We hope that you find these results useful and inspiring for your future research work.

We would like to express our sincere thanks to the honorary chairs for their support: Arkadiusz Wójs (Rector of Wroclaw University of Science and Technology, Poland) and Zhanseit Tuymebayev (Rector of Al-Farabi Kazakh National University, Kazakhstan). We would like to express our thanks to the keynote speakers for their world-class plenary speeches: Tzung-Pei Hong from the National University of Kaohsiung (Taiwan), Michał Woźniak from the Wrocław University of Science and Technology (Poland), Minh-Triet

Tran from the University of Science and the John von Neumann Institute, VNU-HCM (Vietnam), and Minh Le Nguyen from the Japan Advanced Institute of Science and Technology (Japan).

We cordially thank our main sponsors: International University - Vietnam National University HCMC, Hitachi Vantara Vietnam Co., Ltd, Polish Ministry of Education and Science, and Wrocław University of Science and Technology, as well as all of the aforementioned cooperating universities and organizations. Our special thanks are also due to Springer for publishing the proceedings and to all the other sponsors for their kind support.

We are grateful to the Special Session Chairs, Organizing Chairs, Publicity Chairs, Liaison Chairs, and Local Organizing Committee for their work towards 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 select the highest quality papers for the conference. We cordially thank all the authors for their valuable contributions and the other conference participants. The conference would not have been possible without their support. Thanks are also due to the many experts who contributed to the event being a success.

November 2022

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