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Fuchun Sun · Dewen Hu · Stefan Wermter ·
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Cognitive Systems and Information Processing

6th International Conference, ICCSIP 2021 Suzhou, China, November 20–21, 2021 Revised Selected Papers

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Preface

This volume contains the papers from the Sixth International Conference on Cognitive Systems and Information Processing (ICCSIP 2021), which was held in Suzhou, China, during November 20–21, 2021. ICCSIP is a prestigious biennial conference with past events held in Beijing (2012, 2014, 2016, 2018) and Zhuhai (2020). Over the past few years, ICCSIP has matured into a well-established series of international conferences on cognitive information processing and related fields. Similar to the previous event, ICCSIP 2021 provided an academic forum for the participants to share their new research findings and discuss emerging areas of research. It also established a stimulating environment for the participants to exchange ideas on the future trends and opportunities of cognitive information processing research.

Currently, cognitive systems and information processing are applied in an increasing number of research domains such as cognitive sciences and technology, visual cognition and computation, big data and intelligent information processing, bioinformatics, and applications. We believe that cognitive systems and information processing will certainly exhibit greater-than-ever advances in the near future. With the aim of promoting research and technical innovation in relevant fields, domestically and internationally, the fundamental objective of ICCSIP is defined as providing a premier forum for researchers and practitioners from academia, industry, and government to share their ideas, research results, and experiences.

ICCSIP 2021 received 105 submissions, all of which were written in English. After a thorough reviewing process, 41 papers were selected for presentation as full papers, resulting in an approximate acceptance rate of 39%. The accepted papers not only address challenging issues in various aspects of cognitive systems and information processing but also showcase contributions from related disciplines that illuminate the state of the art. In addition to the contributed papers, the ICCSIP 2021 technical program included four plenary speeches by Bo Zhang, Shiqing Chen, Yaonan Wang, and Lining Sun and six invited speeches by well-known scholars and entrepreneurs. We would also like to thank the members of the Advisory Committee for their guidance, the members of the International Program Committee and additional reviewers for reviewing the papers, and members of the Publications Committee for checking the accepted papers in a short period of time.

Last but not the least, we would like to thank all the speakers, authors, and reviewers as well as the participants for their great contributions that made ICCSIP 2021 successful

and all the hard work worthwhile. We also thank Springer for their trust and for publishing the proceedings of ICCSIP 2021.

November 2021

Fuchun Sun
Dewen Hu
Lei Yang
Stefan Wermter
Huaping Liu
Bin Fang

Organization

ICCSIP 2021 was hosted by the Chinese Association for Artificial Intelligence, the Chinese Association of Automation, and the IEEE Computational Intelligence Society. It was organized by the Cognitive Systems and Information Processing Society of Chinese Association for Artificial Intelligence, the Cognitive Computing and Systems Society of Chinese Association of Automation, Tsinghua University, and the Gusu Laboratory of Material Science with the help of the following co-organizers: the Nanjing Tsingzhan Institute of Artificial Intelligence, the China Center for Information Industry Development, and the Artificial Intelligence and Sensing Technology Institute (SIP) Co., Ltd.

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