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## FOREWORD

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### Special Section on Intelligent Information Processing to Solve Social Issues

With the widespread use of sensors and mobile devices, as well as advances in artificial intelligence and knowledge processing technologies, it has become possible to discover and utilize human knowledge and wisdom from the information and big data collected from these devices. In such an environment, there are strong needs to develop innovative systems and methodologies that can clarify social issues in daily life, social systems, and education, and lead to creative and collaborative solutions. For this purpose, advanced collaboration and fusion of various sciences such as information science, language science, and knowledge science are indispensable, and at the same time, how to design and construct appropriate models and innovative systems, and how to apply them practically with high speed and high precision are required.

After the call for papers for this Special Section, we received 16 submissions from several countries. The Editorial Committee worked out with difficulty to carefully reviewing and evaluating the submitted papers. After a thorough reviewing process, 7 papers are accepted for publication in this Special Section. The papers involve creativity support system, decision support system, machine learning technologies, and intelligent processing technologies for social systems.

The Guest Editors would like to express their sincere appreciation to all the authors for their efforts in preparing and submitting their excellent manuscripts, and to the reviewers for their professional and voluntary work. We also appreciate the editorial board of the IEICE Transactions on Information and Systems. Without their support, this special issue would not have been possible. Finally, we would like to express our appreciation for the large efforts of the Editorial Committee Members. Their names and affiliations are listed below.

#### Special Section Editorial Committee Members

Guest Editors-in-Chiefs: Takayuki Ito (Kyoto University, Japan), Thanaruk Theeramunkong (SIIT, Thammasat University, Thailand), Susumu Kunifuji (JAIST, Japan)

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Takayuki Ito, Thanaruk Theeramunkong, and Susumu Kunifuji, Guest Editors-in-Chief

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**Takayuki Ito** (*Member*) received the Doctor of Engineering from the Nagoya Institute of Technology in 2000. He is now professor at Kyoto University, Japan. He was a JSPS research fellow, an associate professor of JAIST, and a visiting scholar at USC/ISI, Harvard University, and MIT twice. He was a board member of IFAAMAS, the PC-chair of AAMAS2013, PRIMA2009, General-Chair of PRIMA2014, IEEE ICA2016, is the Local Arrangements Chair of IJCAI2020, and was a SPC/PC member in many top-level conferences (IJCAI, AAMAS, ECAI, AAAI, etc). He received the JSAI Achievement Award, the JSPS Prize, the Fundamental Research Award of JSSST, the Prize for Science and Technology of the Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science, and Technology (MEXT), the Young Scientists' Prize of the Commendation for Science and Technology by the MEXT, the Nagao Special Research Award of IPSJ, the Best Paper Award of AAMAS2006, the 2005 Best Paper Award of JSSST, and the Super Creator Award of 2004 IPA Exploratory Software Creation Project. He was a JST PREST Researcher, and a principal investigator of the Japan Cabinet Funding Program for Next Generation World-Leading Researchers. He is currently principal investigator of JST CREST project.



**Thanaruk Theeramunkong** (*Member*) received his doctoral degree in Computer Science from Tokyo Institute of Technology. He is now a full professor at SIIT, Thammasat University, Thailand. His current research interests include data mining, machine learning, natural language processing, and information retrieval.



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