
FOREWORD

Special Section on Knowledge, Information and Creativity Support System

Welcome to the Special Section on Knowledge, Information and Creativity Support System, the IEICE Transactions on Information and Systems. Recently, with the fast growth of digital and communication technology, there have been a large number of databases and knowledge bases constructed in several fields. These databases and knowledge bases are normally gigantic with varied information. However, at the present time, even there are some well-founded theories or techniques proposed to handle this problem, research and development in this field is still infant, slowly developed and needs more stimuli. It is necessary to study to find approaches to manage or process such large-scale data, information and knowledge, efficiently and effectively in order to obtain novel knowledge or creativity. So far the creativity point of view has not yet been stressed in terms of computer science and/or information technology. This topic will inevitably become one of the most important research issues in the near future. This proposed special issue aims to support construction, management and creative utilization of data, information and knowledge in both theoretical and practical framework in order to solve the problem of exponential ceaseless growth of information in qualitative and quantitative aspects.

After the call for papers for this Special Section, we received 34 submissions with high quality and a unique contribution in the field from several countries. The Editorial Committee worked out with difficulty to carefully reviewing and evaluating the submitted papers. After a thorough reviewing process, 20 papers are accepted for publication in this Special Section.

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.

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Masaki Nakagawa (*Member*) was born on 31 October 1954 in Japan. He received B. Sc. and M. Sc. degrees from the University of Tokyo in 1977 and 1979, respectively. During the academic year 1977/78, he followed Computer Science course at Essex University in England, and received M. Sc. with distinction in Computer Studies in July 1979. He received Ph. D. in Information Science from the University of Tokyo in December 1988. From April 1979, he has been working at Tokyo University of Agriculture and Technology (TUAT). Currently, he is a Professor of Media Interaction in Department of Computer and Information Sciences. He is also the director of the Center for Innovation and Intellectual Property at TUAT. He has been working on pattern recognition, human interface, especially pen-based interface and educational engineering. He is a member of IPSJ, ACM, IEEE and so on. He served as a vice president of Human Interface Society of Japan in the 2004 and 2005 academic years. He has been serving for several committees of the Japanese government on Industry and Universities partnership and those on IT-oriented and IT supported learning. He is currently appointed as a program officer of the Special Coordination Funds for Promoting Science and Technology from MEXT of Japan.



Thanaruk Theeramunkong (*Member*) received his bachelor degree in Electric and Electronics, and master and doctoral degrees in Computer Science from Tokyo Institute of Technology in 1990, 1992 and 1995, respectively. In 1995–1998, he worked as a research associate at Japan Advanced Institute of Science and Technology (JAIST), Ishikawa, Japan. He returned back to Thailand and started working as an assistant professor at Sirindhorn International Institute of Technology (SIIT), Thammasat University. From 2004, he worked as an associate professor of the School of Information and Computer Technology, SIIT, Thammasat University. He is a founder of Knowledge, Information and Data Management Laboratory at SIIT. He got several grants from Thai government, such as a project grant on Thai information retrieval and data mining (IRDM) from National Electronics and Computer Technology Center (NECTEC), a project grant on construction of Thai medical knowledge base from NECTEC and a project grant on Thai News Information Extraction from Thailand Research Fund. His current research interests include data mining, machine learning, natural language processing, human language technology, information retrieval and knowledge discovery in large-scaled text databases. He is a member of the ACM and the ECTI (Thailand).

