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. With current advance in digital and communication technology, there have been a large number of databases and knowledge bases constructed in several various fields. To make use of these resources effectively, we need to develop basic theories or techniques to transform large-scaled data into meaningful information and knowledge, and then to support our creativity process. At present, 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. Moreover, so far the creativity point of view has not yet been stressed in terms of computer science and/or information technology. This area of interest will inevitably become one of the most important research issues in the near future. The topics in this special issue include knowledge acquisition, knowledge discovery and data mining, knowledge representation and knowledge exploitation.

After the call for papers for this Special Section, we received 41 submissions from several countries. The Editorial Committee worked out with difficulty to carefully reviewing and evaluating the submitted papers. After a thorough reviewing process, 12 papers are accepted for publication in this Special Section. Three papers are related to knowledge acquisition, four papers explore knowledge discovery and data mining, three papers involve knowledge representation, two papers are categorized as knowledge applications and intelligent user interfaces.

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.

Guest Editors:

Susumu Kunifuji (Japan Advanced Institute of Science and Technology, Japan)

Toshihiko Yamakami (ACCESS, Japan)

Editorial Committee Secretary:

Tessai Hayama (Japan Advanced Institute of Science and Technology, Japan)

Editorial Committee Members:

Virach Sornlertlamvanich (TCL, NICT and NECTEC, Thailand)

Choochart Haruechaiyasak (NECTEC, Thailand)

Cholwich Nattee (SIIT, Thammasat University, Thailand)
Ekawit Nantajeewarawat
Janalux Chalidabhongse
Pakinee Suwannajan (SIIT, Thammasat University, Thailand)
(SIIT, Thammasat University, Thailand)

Thepchai Supnithi (NECTEC, Thailand)
Nick Cercone (York University, Canada)

Hitoshi Isahara (NICT, Japan)

Sadanori Ito (Tokyo University of Agriculture and Technology, Japan)
Mikifumi Shikida (Japan Advanced Institute of Science and Technology, Japan)

Yasuyuki Sumi (Kyoto University, Japan) Jiro Tanaka (Tsukuba University, Japan)

Kazushi Nishimoto (Japan Advanced Institute of Science and Technology, Japan)

Ho Tu Bao (Japan Advanced Institute of Science and Technology, Japan)

Kenji Mase (Nagoya University, Japan) Kazuo Misue (Tsukuba University, Japan)

Motoki Miura (Japan Advanced Institute of Science and Technology, Japan)

Koichi Hori (The University of Tokyo, Japan) Riichiro Mizoguchi (Osaka University, Japan) Jun Munemori (Wakayama University, Japan)

Takaya Yuizono (Japan Advanced Institute of Science and Technology, Japan)

Masaki Nakagawa, Guest Editor-in Chief

Thanaruk Theeramunkong, International Guest Editor

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 ACM and ECTI.