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## FOREWORD

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### Special Section on Data Engineering

It is our great pleasure to publish this special section on data engineering. The recent years are often called as the information explosion era, or the info-plosion era for short. In order to survive this era, data engineering and its related technologies have an essential role. The research field of data engineering still continues to expand its topics to Web technologies, data mining, bioinformatics, and other applications that need to deal with a large amount of data as well as databases.

In the spring of 2010, two important conventions related to data engineering have been held in Japan: DEIM Forum 2010, which is the largest domestic workshop, and DASFAA 2010, which is one of the most important international conference in this field. Since this special section was planned in connection with these conventions, it is jointly published both in English and Japanese versions of the IEICE transactions.

The editorial committee received 30 regular papers from Japan, China, South Korea, Taiwan, Thailand, the United States, and Iran. The received papers had a wide variety of topics, such as data stream processing, database core technologies, information recommendation, ontology, Web mining, social network systems, etc.

After all the papers were carefully reviewed by two anonymous referees, the editorial committee members deeply discussed the quality and significance of each paper based on the review reports. The review process was rather difficult, and the editorial committee has finally selected 11 papers. Therefore, these papers are ensured to be high quality research achievements in the field of data engineering.

Lastly, we would like to thank not only all the authors who submitted their contributions, but also the referees and the editorial committee members for their dedicated efforts to the reviewing process. I would also like to express my gratitude to Guest Editor, Dr. Kaname Harumoto of Osaka University who adequately organized all the editing process of the English version of this special section, and Dr. Teruhisa Hochin of Kyoto Institute of Technology and Dr. Kaoru Katayama of Tokyo Metropolitan University who supported me for editing the Japanese version of the special section.

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Jun Miyazaki, Guest Editor-in-Chief

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**Jun Miyazaki** (*Member*) received a B.E. degree from Tokyo Institute of Technology, Japan, in 1992, and both M.S. degree and Ph.D from Japan Advanced Institute of Science and Technology (JAIST), Japan, in 1994, 1997, respectively. He visited the University of Texas at Arlington as a visiting scholar from 2000 through 2001. He was a researcher of the PRESTO program of JST from 2003 through 2007. He is currently an associate professor at Graduate School of Information Science, Nara Institute of Science and Technology (NAIST), Japan. His research interests include database core technologies, information retrieval, and high performance I/O systems. He is a member of IPSJ, DBSJ, ACM, and IEEE-CS.

