FOREWORD

Special Section on Knowledge-Based Software Engineering

The special interest group named Knowledge-Based Software Engineering (SIG-KBSE) was established in 1992 in the Institute of Electronics, Information and Communication Engineers (IEICE).

It is possible to think the software development to be a series of activities to realize human knowledge as an algorithm on the computer. SIG-KBSE offers the opportunities for discussions and the presentations concerning not only a software development method using knowledge engineering but also an actual software development. The objective of this special section is to publish and overview recent progress in the interdisciplinary area of Artificial Intelligence and Software Engineering.

SIG-KBSE meeting is held every other month. Besides publishing papers including software engineering and knowledge engineering, SIG-KBSE also supports international conferences. The Joint Conference on Knowledge-Based Software Engineering (JCKBSE) is held every two years in a European country or Russia. The 10th JCKBSE2012 was held in Rhodes, Greece in 2012.

This section was planned to include papers based on the presentations at JCKBSE2012 and the papers submitted for the CFP. In preparation of this special section, an Editorial Committee was organized and a CFP was distributed via IEICE transactions. 25 papers were submitted in response to the CFP (22 from Japan, 2 from Korea, and 1 from China). After extensive review processes, 11 papers were accepted. This shows the strictness of reviewing processes as well as high quality of accepted papers.

Finally, I would like to express my sincere appreciation and gratitude to all the authors for their contributions. Special thanks are due to the following editorial committee members and additional referees for their very considerable efforts to review the submitted papers and their assistance of preparing for this Special Section.

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Saeko Matsuura, Guest Editor-in-Chief

Saeko Matsuura (*Member*) received the MS degree in mathematics in 1982 from the Graduate School of Tsuda College, Japan. She was a researcher at Kanri Kogaku Kenkyuusyo Ltd. She received Dr. Information and Computer Science in 2001 from Waseda University. Since 2002, she was an associate professor at Shibaura Institute of Technology (SIT) and she is currently a professor at SIT since 2006. Her interest area is software engineering, object-oriented modeling techniques, and formal approaches to software development. She is a member of IEEE computer Society, Information Processing Society of Japan (IPSJ), and Japan Society for Software Science and Technology (JSSST). She is currently a chairman of SIG Knowledge-Based Software Engineering of IEICE. She received the 1993 IPSJ SIG Research Award and the 2004 FIT Paper Award from IPSJ.

