FOREWORD

Special Section on Formal Approach

Formal methods and techniques play a key role in the design and development of highly reliable information systems, including both hardware and software. The last decades have seen various new techniques and deep theoretical results using formal methods in remarkably many fields such as modeling, requirements analysis, specification, code generation, testing, verification, maintenance, reuse, and security.

The Special Section on Formal Approach aims at stimulating research on all aspects of formal approach to information systems, ranging from fundamental theory to case studies in practical systems. In response to the Call for Papers, ten papers were submitted. After a thorough and careful review process, the editorial committee selected four papers of exceptional quality that prove the significance and importance of formal approach research.*

On behalf of the editorial committee of the Special Section, I would like to express my sincere gratitude to all who submitted their valuable papers. I am also grateful to the external reviewers and the editorial committee members, especially Guest Editors Dr. Yoshinao Isobe, Dr. Kozo Okano, Dr. Tatsuhiro Tsuchiya and Dr. Shoji Yuen, for their careful and devoted efforts towards the success of the Special Section and the progress of formal approach.

* Three out of the four accepted papers appear in this section due to some reason.

Guest Associate Editors:

Kiyoharu Hamaguchi (Shimane University) Ichiro Hasuo (The University of Tokyo) Nao Hirokawa (JAIST) Koji Iwanuma (University of Yamanashi) Yoshinobu Kawabe (Aichi Institute of Technology) Koichi Kobayashi (JAIST) Masaki Nakamura (Toyama Prefectural University) Hiroshi Sakamoto (Kyushu Institute of Technology) Tachio Terauchi (Nagoya University) Guest Editors: Yoshinao Isobe (AIST) Kozo Okano (Osaka University) Tatsuhiro Tsuchiya (Osaka University) Shoji Yuen (Nagoya University)

Kazuhiro Ogata, Guest Editor-in-Chief

Kazuhiro Ogata (*Member*) is an associate professor at School of Information Science, Japan Advanced Institute of Science and Technology (JAIST). He received his PhD in engineering from Graduate School of Science and Technology, Keio University in 1995. He was a research associate at JAIST from 1995 to 2001, a researcher at SRA Key Technology Laboratory, Inc. from 2001 to 2002, a research expert at NEC Software Hokuriku, Ltd. from 2002 to 2006, and a research associate professor at JAIST from 2006 to 2009. Among his research interests are software engineering, formal methods and formal verification.

