FOREWORD

Special Section on Formal Approach

Formal methods and techniques play a key role in designing and developing highly reliable information systems and embedded systems. The last decades have seen various new techniques and profound theoretical results using formal methods in surprisingly many fields such as modeling, requirements analysis, specification, automatic generation of codes, test, verification, maintenance, and reuse. They are rapidly extending their application domains as a result of the recent growth of information and communication technologies.

The Special Section on Formal Approach aims at stimulating research on formal approach to information systems and embedded 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 five 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. Yoshinobu Kawabe, Dr. Kozo Okano, and Dr. Tatsuhiro Tsuchiya, for their careful and devoted efforts towards the success of the Special Section and the progress of formal approach.

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Yoshinao Isobe (*Member*) received his BEng and MEng degrees in Electrical Engineering from Shibaura Institute of Technology in 1990 and 1992 respectively. In 1992, he joined Electrotechnical Laboratory, MITI. He received his DEng degree from Shizuoka University in 2001. He was a visiting researcher of the University of Wales, Swansea in 2003. He is currently the group leader of Software Reliability Research Group in Research Institute for Secure Systems, AIST, and a visiting associate professor in Japan Advanced Institute of Science and Technology. His research interests include formal verification of concurrent systems. He is a member of IEICE, JSSST, and IPSJ.

