FOREWORD

Special Section on Formal Approach

Formal methods and techniques play a key role in designing and developing highly reliable information systems, embedded systems and security protocols. 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, embedded systems and security protocols, ranging from fundamental theory to case studies in practical systems. In response to the Call for Papers, seven papers were submitted. After a thorough and careful review process, the editorial committee selected three 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. Hiroyuki Nakagawa, Dr. Masaki Nakamura, 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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Yoshinobu Kawabe (Member) received his BE, ME, and Ph.D. degrees in information engineering from Nagoya Institute of Technology in 1995, 1997 and 2003, respectively. He joined NTT Communication Science Laboratories, Nippon Telegraph and Telephone Corporation in 1997. In 2002, he was a visiting research scientist at MIT Laboratory for Computer Science. Since 2008, he has been an Associate Professor of Faculty of Information Science, Aichi Institute of Technology. His current research interests include formal methods for software and security verification. He is a member of ACM, JSSST and IPSJ.