FOREWORD

Special Section on Formal Approaches

Formal methods and techniques play a crucial 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, testing, verification, and maintenance. They are rapidly extending their application domains with the recent growth of information and communication technologies.

Formal methods have a long history and are a mature discipline, while they still have much potential to evolve with the recent advance in computer power and the emergence of new computer paradigms.

The Special Section on Formal Approaches aims at stimulating research on formal approaches to information systems, ranging from fundamental theory to case studies on real-world systems. In response to the Call for Papers, a total of seven submissions were received. After a thorough and careful review process, the editorial committee selected two papers 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 the guest editors of this section, Prof. Tomoyuki Yokogawa and Prof. Koichi Kobayashi, for their devoted efforts towards the success for the section and the progress of formal approaches.

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Shingo Yamaguchi (Yamaguchi University), Guest Editor-in-Chief

Shingo Yamaguchi (*Senior Member*) received the B.E., M.E. and D.E. degrees from Yamaguchi University, Japan, in 1992, 1994 and 2002, respectively. He was a Visiting Scholar in the Department of Computer Science at University of Illinois at Chicago, United States, in 2007. He is currently a Professor in the Graduate School of Sciences and Technology for Innovation, Yamaguchi University, Japan. His research interests are in the area of net theory and its applications. He is a senior member of IEEE.