FOREWORD

Special Section on Emerging Technologies and Applications for Ad Hoc and Wireless Mesh Networks

Ad hoc and wireless mesh networks, which construct wireless networks by autonomous distributed manner, are promising R&D areas and novel technologies and new applications emerge recently. This special section presents the latest R&D results in technologies and applications for ad hoc and wireless mesh networks to foster development and deployment.

In response to the Call for Papers of this section, twenty five papers and seven letters were submitted. As a result of the comprehensive and rigorous review process of these papers and letters, eight papers and one letter were selected for publication. The selected papers and letter cover rate control, secure routing, data transfer, reliable broadcast, CSMA/CA unicast communication, robust data collection, P2P group conference, flow control and fuzzy routing for ad hoc and wireless mesh networks.

This special section provides an excellent invited paper titled “Generating Realistic Node Mobility and Placement for Wireless Multi-hop Network Simulation” by Prof. Bratislav Milic and Prof. Miroslaw Malek, Humboldt University in Berlin. This paper presents NPART (Node Placement Algorithm for Realistic Topologies) and its integrated tool, which allows easy and time-efficient generation of highly complex, realistic simulation scenarios.

As Guest Editor-in-Chief for this special section, I would like to express my sincere appreciation to those who have contribution to this section, including all the Guest Associate Editors and all the reviewers of the submitted papers. Special thanks are due to Prof. Masaki Bandai, Sophia University and Prof. Hiraku Okada, Nagoya University for their great efforts all conducted in a timely and professional manner as Guest Editors.

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Yoshiaki Kakuda (Member) received the B.E., M.Sc., and Ph.D. degrees from Hiroshima University, Japan, in 1978, 1980 and 1983, respectively. From 1983 to 1991, he was with Research and Development Laboratories, Kokusai Denshin Denwa Co., Ltd. (KDD). He joined Osaka University from 1991 to 1998 as an Associate Professor. He is currently a Professor in the Graduate School of Information Sciences, Hiroshima City University, since 1998. His current research interests include network software engineering, assurance networks and mobile ad hoc networks. He is a member of IEEE (U.S.A) and IPSJ (Japan). He received the Telecom. System Technology Award from Telecommunications Advanced Foundation in 1992.