
FOREWORD

Special Section on Network Virtualization, and Fusion Platform of Computing and Networking

While the Internet has become the indispensable social infrastructure for supporting our social and economic activities, its various issues have been also addressed in the areas of security, availability, robustness, etc. It is necessary to design and implement an innovative information and communication infrastructure to deliver communication services that meet demands from the users in a secure, stable and flexible manner.

Advanced network virtualization — systematically consolidating computing, networking, and storage resources and dynamically and elastically utilizing them — has recently caught our attention and has become a key to realizing a future information communication infrastructure. It is expected to enable coexistence of multiple customized networks, prompt delivery of innovative network functionalities, programmable network within isolated resources, stable operation and management of massive ICT systems, extension of cloud computing to networking, and realization of secure service infrastructures.

We thus called for publications to encourage discussion on advanced network virtualization and fusion of computing and networking. We received 23 papers (20 full papers and 3 letters) including 9 overseas submissions. After careful reviews, 6 papers and 2 letters have been accepted for publication in the area of QoS, in-network processing, flow-based traffic engineering, software defined networking, etc. In addition, an excellent invited paper regarding the federation of network testbeds has been included for publication.

On behalf of the editorial committee, I would like to express our sincere appreciation of significant contributions to this section by all the authors and the reviewers.

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Akihiro Nakao (*Member*) received a B.S. (1991) in physics and an M.E. (1994) in information engineering from the University of Tokyo. He was at IBM Yamato Laboratory/at Tokyo Research Laboratory/at IBM Texas Austin from 1994 till 2005. He received an M.S. (2001) and a Ph.D. (2005) in computer science from Princeton University. He has been teaching as an associate professor in applied computer science, at Interfaculty Initiative in Information Studies, Graduate School of Interdisciplinary Information Studies, the University of Tokyo since 2005. (He has also been an expert visiting scholar/a project leader at National Institute of Information and Communications Technology (NICT) since 2007.)

