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## FOREWORD

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### Special Section on Internet Technology and its Architecture for Ambient Information Systems

The Internet is everywhere now and is recognized as a social infrastructure for communication to support a wide variety of human activities. However, the technology surrounding the Internet still has a lot of room to grow, and a lot of research and development processes are still ongoing.

As the Internet environment grows and technologies have improved, issues with supporting human activities using Internet technologies have changed. The starting point for the Internet was to connect the central computers at computer centers and laboratories throughout the world to exchange information. After laptop computers or other small portable devices and wireless networking devices became popular, the concept of “mobile networking” appeared to support the migration of people with communication devices. As networking devices got smaller and cheaper, the concept of “ubiquitous networking” was introduced to support people anytime anywhere by environment with equipping networking features into everything. The next stage of “ubiquitous networking” is said to be “ambient networking,” which spontaneously supports people by recognizing their personal situations without any particular prompting from people.

Based on these technology trends, a special section on “Technology and its Architecture for Ambient Information Systems” is planned for the sixth installment in a series on Internet Technology. Twenty-four papers were submitted for this section (23 full papers and 1 letter) and fourteen of them are overseas submissions. After a careful review process, nine papers were accepted for publication. We also have two invited papers that report on the advanced activities in the field of “ambient networking.” All of the papers include hot topics on the Internet and should be important in constructing the coming “ambient networking” era.

Finally, the editorial committee members would like to express appreciation to the authors for their valuable contributions and to the reviewers for the noteworthy comments and suggestions, and their cooperation during the reviewing process under a tight schedule.

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Motonori Nakamura, Guest Editor-in-Chief

**Motonori Nakamura** (*Member*) graduated from Kyoto University, Japan, where he received B.E., M.E., and Ph.D. degrees in engineering in 1989, 1991, and 1996, respectively. He has been an assistant professor at the Department of Computer Science, Ritsumeikan University since 1994. Since 1995, he has been an associate professor in the Faculty of Economics at Kyoto University, and moved to the Center for Information and Multi media Studies at Kyoto University in 1999. He has been an associate professor in the Academic Center for Computing and Media Studies at Kyoto University since 2002. He has been a professor at the National Institute of Informatics in Japan (NII) since 2007, and has also been a professor at the Graduate University for Advanced Studies (SOKENDAI) since 2008. He is a board member of the WIDE Project. His research interests are message transport networking, network communications, high-speed broadband data transport system development, and next-generation internet. He is also a member of ISOC, IPSJ, and JSSST.

