
FOREWORD

Special Section on Emerging Technologies on Ambient Sensor Networks toward Future Generation

Sensor networks allow gathering ambient information from people, products, and sensing devices for real space. Sensing data should be processed, analyzed, and applied for the enhancement or assistance of human activities, and this is called ambient intelligence. Ambient sensor networks are those sensor networks that interactively cooperate with ambient intelligence. It is expected that gentle social environments, such as efficient electric power use in smart grids and effective transportation systems, will be established through ambient sensor networks. Applied studies have been promoted in the field of technologies that support ambient sensor networks. Supporting such progressing technologies and promoting further collaboration with other fields is important toward the future generation of ambient sensor networks.

Considering such perspective, the IEICE Technical Committee on Ambient Intelligence and Sensor Networks has planned the “Special Section on Emerging Technologies on Ambient Sensor Networks Toward Future Generation.”

For this special section, 19 papers from Japan and other countries were submitted. A total of six papers were accepted after undergoing a rigorous and fair peer-review process. These accepted papers present cutting-edge research results in the emerging area of ambient sensor networks. Moreover, two invited papers are solicited to cover the latest research trends in this field. We are very pleased to announce that this special section was able to capture a wide and balanced range of fundamental and practical research topics in ambient sensor networks.

Finally, as the guest editor-in-chief, I would like to express my sincere appreciation to all the authors for their excellent contributions, and to the reviewers and Editorial Committee members for their great effort.

Special Section Editorial Committee

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Hidekazu Murata, Guest Editor-in-Chief

Hidekazu Murata (*Senior Member*) received B.E., M.E., and Ph.D. degrees in electronic engineering from Kyoto University, Kyoto, Japan, in 1991, 1993, and 2000, respectively. In 1993, he joined the Faculty of Engineering, Kyoto University. From 2002 to 2006, he served as Associate Professor of the Tokyo Institute of Technology. He has been at Kyoto University since October 2006, and is currently an Associate Professor at the Department of Communications and Computer Engineering, Graduate School of Informatics. His major research interests include signal processing and hardware implementation, particularly its application to cooperative wireless networks. He received the Young Researcher's Award from Japan's IEICE in 1997, Ericsson Young Scientist Award in 2000, Young Scientists' Prize of the Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science, and Technology in 2006, Paper Award of the IEICE in 2011 and 2013, and IEEE ICC Best Paper Award in 2014. He is a member of IEEE and IEICE.

