
FOREWORD

Special Section on Robust Speech Processing in Realistic Environments

One reason speech research has attracted so many scientists and engineers is that speech is a signal of human communication, which is adapted for working in the real and ever-changing world. It is important for speech systems to replicate that ability as much as possible. In order to build such a flexible speech system, robustness to the change of environment is crucial in the basic theories and technologies. In this special section, a variety of research discusses the issues of robustness, including advanced modeling and adaptive and/or selective mechanisms, all of which are quite easy for human beings.

In the response to our Call For Papers for this section, we received 43 submissions of high quality and with unique contributions to the field from several countries. The Editorial Committee worked hard to carefully review and evaluate the submitted papers. After a thorough review process, 24 papers and two letters were accepted for the publication. In addition to the regular papers, a review of the robust acoustic signal processing technologies was contributed by Dr. Futoshi Asano, a leading scientist in the field. The guest editor believes that these excellent works open up new vistas on speech theory, technology and applications.

The Editorial Committee would like to express sincere appreciation to all of the authors for their efforts in preparing and submitting their excellent manuscripts, and to the reviewers for their professional and voluntary work. We also appreciate the editorial board of the IEICE Transactions on Information and Systems. Finally, I would like to express my appreciation for the great efforts of the Editorial Committee Members. Their names and affiliations are listed below.

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Kazuya Takeda, Guest Editor

Kazuya Takeda (*Member*) received his B.E.E., M.E.E., and Doctor of Engineering degrees from Nagoya University, Nagoya Japan, in 1983, 1985, and 1994, respectively. From 1986 to 1989 he was a researcher at Advanced Telecommunication Research laboratories (ATR), Osaka Japan. He stayed at MIT, Cambridge USA as a visiting Scientist from November 1987 to April 1988. From 1989 to 1995, he has been a researcher and research supervisor at KDD Research and Development Laboratories, Kamifukuoka, Japan. From 1995 to 2003, he was an associate professor of the faculty of engineering at Nagoya University, Nagoya Japan. He also led an information transformation research team at Center for Integrated Acoustic Research (CIAIR) at Nagoya University. From 2003 he has been a professor at graduate school of information science at Nagoya University. His current research interest is media signal processing and its applications include; spatial audio, robust speech recognition, behavior modeling and interfaces. He is a member of Acoustic Society of Japan (ASJ), Information Processing Society Japan (IPSJ) and IEEE. He is an associate editor of IEICE Transaction on System and Information. He is an executive board member of ASJ. He is the chair of the Spoken Language Processing technical group of IPSJ.

