FOREWORD

Special Section on Enriched Multimedia —New Technology Trends in Creation, Utilization and Protection of Multimedia Information—

Processing and communication of multimedia signals such as image, audio, and video are important and fundamental technologies for our daily life. Since smartphones became popular, such technologies have been used not only by the specialists but also ordinary people. Because of this fact, it becomes more and more important to develop multimedia signal processing methods that make use of multimedia information easier and safer.

This special section is planned to compile papers of the research works related to the topics stated above, such as protection, creation, and measurement of multimedia signals, as well as the proposal of adding new value to the legacy media. The editorial board of this special section was based on the workshops organized by the Enriched Multimedia (EMM) Technical Group of IEICE, which was established in 2011, aiming to promote the research works related to multimedia information hiding and other signal processing issues for enriching the multimedia information.

The editorial committee received 15 papers, including one invited paper. After the intensive review, the editorial committee has selected eight papers offering high-quality and outstanding research results. The invited paper is a lecture of the evaluation criteria of information hiding. This work is based on the recommendation of the Committee of Information Hiding and its Criteria (IHC), which is a committee under the EMM Technical group. Besides, we have two papers of image processing (compression and watermarking), one paper of audio processing (hashing) and three papers of video processing (streaming, modeling and watermarking). Also, one paper is concerned with the enrichment of QR code.

Finally, I would like to take this opportunity to thank all the contributors and reviewers for their dedicated efforts. I would especially like to thank Prof. Michiharu Niimi of the Kyushu Institute of Technology and Prof. Masaki Kawamura of Yamaguchi University, Guest Editors of this special section, for their excellent organization of the entire editing process.

Special Section Editorial Committee Members

Guest Editors: Michiharu Niimi (Kyushu Institute of Technology), Masaki Kawamura (Yamaguchi Univ.) Guest Associate Editors: Masatsugu Ichino (The Univ. of Electro-Communications), Shoko Imaizumi (Chiba Univ.), Motoi Iwata (Osaka Prefecture Univ.), Masashi Unoki (JAIST), Isao Echizen (National Institute of Informatics), Tomoko Kajiyama (Aoyama Gakuin Univ.), Kotaro Sonoda (Nagasaki Univ.), Toshio Modegi (Dai Nippon Printing), Takaaki Yamada (Hitachi, Ltd)

Akinori Ito (Tohoku University), Guest Editor-in-Chief

Akinori Ito (Senior Member) was born in Yamagata, Japan in 1963. He received the B.E., M.E., and Ph.D. degrees from Tohoku University, Sendai, Japan, in 1984, 1986 and 1992 respectively. He is now a Professor of Graduate School of Engineering, Tohoku University. He has engaged in multimedia signal processing, spoken language processing, and multimodal language learning system. He is a member of the Acoustical Society of Japan, the Information Processing Society Japan, Human Interface Society and the IEEE.



1