
FOREWORD

Special Section on Enriched Multimedia — Potential and Possibility of Multimedia Contents for the Future —

Multimedia data such as image, audio and video are important bases of today's information society. This trend will surely continue to the future, where use of multimedia data will be a part of the indispensable infrastructure. Towards such future, we need to research and develop multimedia signal processing technologies that make the use of multimedia data more secure, more robust and more convenient.

This special section is planned to compile papers of the research works related to the multimedia signal processing for the future, 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 eighteen papers, including one invited paper. After the intensive review, the editorial committee has selected nine papers offering high-quality and outstanding research results. The invited paper proposes an artificial device that prevents one's fingerprint from being captured and abused. Besides, we have two papers on image processing (analysis of image scrambling and image identification), two papers on video processing (video coding and evaluation metric), one paper for secure authentication for device unlocking, one paper on speech privacy, and two letters on speech and audio processing (music information retrieval and audio watermarking).

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. Masaki Kawamura of Yamaguchi University and Dr. Ryouichi Nishimura of National Institute of Information and Communications Technology, Guest Editors of this special section, for their excellent organization of the entire editing process.

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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.

