
FOREWORD

Special Section on Innovation of Medical Information and Communication Technology for Dependable Society

Advanced medical healthcare systems and services based on information and communication technology (ICT), so-called medical ICT has been successfully known to provide a new paradigm to research and development areas due to innovative integration between medicine and engineering. However, high reliability, security, fault tolerance, robustness, or dependability in communication networks has not been satisfied yet for dependable medical healthcare systems and services. In this special section, various technologies in physical, multimedia access control (MAC), network and their cross layers have been submitted as well as related issues. The editorial committee finally selected only two papers through careful and fair reviews for six submissions. Moreover, two invited papers were added to cover latest world trends in medical ICT field. As a result, this special section cannot cover enough wide range of subjects but involve high level of new results and overviews. In order to promote research, development, business and service of these related fields, IEICE technical group of healthcare medical ICT has cosponsored 2015 international symposium on medical information and communication technology (ISMICT2015) in Kamakura, Japan during March 24–26, 2015.

It is the editorial committee members' believe that this special section can provide worthwhile insights to the readers on the related areas and will accelerate further academic studies and business as well as clinical services. As the guest editor-in-chief, I would like to express my sincere appreciation to all the authors for contributing their research results and to all the editorial committee members and reviewers for their diligent works.

Special Section Editorial Committee Members

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Ryuji Kohno, Guest Editor-in-Chief

Ryuji Kohno (*Fellow*) received the Ph.D. degree in electrical engineering from Univ. of Tokyo in 1984. Since 1998 he has been a Professor in Yokohama National University (YNU). Since 2007, he has been a Finnish distinguished professor in Univ. of Oulu, Finland. In order to improve his capability of technical innovation and global business, as part-time works he played a role of a director of SONY CSL/ATL during 1998–2002 and a director of the UWB Tech. Inst. and a program coordinator of medical ICT Inst. during 2002–2011, and has been a CEO of the company “University of Oulu Research Institute Japan — CWC-Nippon Co.” since 2012. The meanwhile, in YNU he has contributed as the principal leader in 21st century COE of “creation of future social infrastructure based on ICT” during 2002–2007, and in global COE of “Innovative Integration between medicine and engineering based on ICT” during 2008–2013 while he has been a director of medical ICT center since 2006. He was elected as a BoG member of the IEEE Information Theory Society in 2000, 2002, and 2006. He was an editor of the IEEE Trans. Information Theory, Trans. Communications and Trans. Intelligent Transport Systems. He was a vice-president of IEICE Engineering Sciences Society (ESS) and an editor-in-chief of Japanese volume of ESS. He was awarded IEICE Greatest Contribution Award and NTT DoCoMo Mobile Science Award in 1999 and 2002, respectively.

