



Special issue on deep learning in biomedical signal and medical image processing [1128 T]

Tao Hu¹ · Liu Liu² · Wen Si³

Published online: 17 February 2020

© Springer Science+Business Media, LLC, part of Springer Nature 2020

Recent improvements in artificial intelligence, big data and machine learning have enhanced the importance of biomedical signal and image processing research. Biomedical signal processing requires the analysis of measurements at specific periods in time and noted on a patient's chart to provide useful information upon which clinicians can make determinations. Biomedical image processing is similar in concept to biomedical signal processing in multiple dimensions. It includes the analysis, enhancement and presentation of images captured via X-Ray, Ultrasound, MRI, nuclear medicine and visual imaging technologies. Deep learning is now quickly extending in all science and engineering research fields, including biomedical sciences. It is practised to build computational intelligent models directly from the biomedical signals.

The aim of this special issue is to capture recent research and seek contributions of high-quality papers in this field. Under the support of related worldwide researchers, 77 papers have been received. Based on the review comments from peer reviewers, 29 papers have been selected out for the special issue and authors have revised their paper according to the comments before final acceptance.

This special issue has been made possible by the support of Prof. Borko Furht, the Editor-in-Chief of *Multimedia Tools and Applications*. We would like to express our gratitude to the authors for their contributions, the referees for ensuring the quality of the accepted papers, and the staff of the Editorial Office and Production Department for their help in finalizing this special issue.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

✉ Tao Hu
Hutao.ohio@gmail.com; thu6@kent.edu

¹ Kent State University, Kent, OH, USA

² Nanjing University of Posts and Telecommunications, Nanjing, China

³ College of Engineering, University of South Florida, Tampa, FL, USA