Editorial: Applications of Soft Computing and Machine Learning Techniques for Biomedical Signals and Images

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Biomedical signals like ECG, EEG, EMG, EOG, ERG etc. and images such as ultrasound, MRI, CT, PET etc. are very much useful for assessing the wellbeing of a human being. In order to determine the abnormality in a particular organ or part of the body, physicians use these signals and images. Although, today’s signal recorders and image scanners are of excellent resolution and quality, sometimes they fail to convey the actual scenario of the body part/organ [1].

Soft computing and machine learning methods play important role in dealing with biomedical signals/ images and they have numerous applications like noise/ artifact removal from signals/ images, early detection of seizure/ cancer/ tumours, fusion of images for better diagnosis, classification of signals/ images and much more [2,3].

This special issue aims at compiling the novel research outcomes of various soft computing and machine learning algorithms applied to varieties of biomedical signals/ images. We have received an exceptional response to this thematic issue. Some of the notable contributions include Applications of Deep Learning and convolutional neural network for cancer detection, Content-based medical image retrieval, Tumour detection using MRI, COVID-19 screening using chest radiography, machine Learning based epileptic seizure detection [4] etc.

REFERENCES


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