Editorial PreFace

Special Issue on Biomedical Engineering and Clinical Applications

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Biomedical Engineering being an interdisciplinary field of Engineering integrates the engineering and medical domains. It brings the engineer and clinician to come together to solve the real-time clinical problems in a better manner. This special issue highlights the research idea pertaining to engineering perspective that can be introduced into the real-time clinical scenario. Five articles are recommended for publication under this issue. The preliminary research work has been published in the two International conferences, MedCom2014 - International Conference on Medical Imaging, m-Health and Emerging Communication System and I4C2014-International Conference on Circuits, Control, Communication and Computing.

The first article proposes a case study in fatigue by exploiting the EEG signals. The authors have discussed the synchronization of the brain due to effect of fatigue. The second article provides a comparative study of two feature extraction parameters, fuzzy entropy and relative spike amplitude for recognizing the transitions between the wake and sleep stage1. EEG signals have been used for this specific study. The third article attempts to create automated diagnosis system for cervical cancer by making use of artificial neural network model. An automated threshold algorithm for exact location and segmentation of skin lesion was proposed in the fourth article. Finally the fifth one discusses the classification of MRI brain images using corpus callosum shape measurements.

I hope that this special issue will bring more ideas to the readers and especially for the budding researcher, this will provide a way to start their research. I also hope that the readers will recommend this issue to their colleagues and think of IJBCE for their next submission, especially in the field of biomedical and Clinical Engineering.

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