Call for Papers

The *Journal of Biomedical Research* plans to publish a special issue on

Advances in EEG Signal Processing and Machine Learning for Epileptic Seizure Detection and Prediction

Epilepsy is the most common neurological disorder of the brain that affects people worldwide at any age from newborn to adult. It is characterized by recurrent seizures, which are brief episodes of signs or symptoms due to abnormal excessive or synchronous neuronal activity in the brain. The electroencephalogram, or EEG, is a physiological method to measure and record the electrical activities generated by the brain from electrodes placed on the surface of the scalp. EEG has become the most used signal for detecting and predicting epileptic seizures. Machine learning for EEG signal processing constitute an important area of artificial intelligence dealing with the setting up of automated computer-aided systems allowing to help the medical staff, e.g. neurophysiologists, for detecting and predicting epileptic seizure activities from EEG signals. It offers solutions to difficult biomedical engineering problems related to detecting and predicting EEG Epileptic seizures.

In the light of the rapid development of machine learning tools for signal processing, this special issue aims to solicit original research papers as well as review articles focusing on recent advances in EEG signal processing and machine learning for Epileptic seizure detection and prediction.

Topics of interest should be related to Epileptic seizure detection and/or prediction, and include (but are not limited to) the following:

- EEG signal processing
- Time-frequency EEG signal analysis
- Non-stationary EEG signal analysis
- EEG feature extraction and selection
- Machine learning for EEG signals
- EEG classification and clustering
- Deep learning for EEG
- EEG Big Data
- EEG-based BCI (Brain-Computer Interface)
- Internet of things for prediction
- EEG-based computer-aideddiagnosis systems
- Related applications

Important Dates:

Submission deadline: February 15th, 2019
Completion of first-round reviews: March 15th, 2019
Submission deadline for revised papers: April 15th, 2019
Final acceptance/rejection notification: April 30th, 2019
Publication: June 2019

Submission Guidelines:

All submissions have to be prepared according to the Guide for Authors as published in the Journal
Web Site: http://www.jbr-pub.org.cn
Submissions should be sent through: https://mc03.manuscriptcentral.com/jbrint
Authors should select the acronym "**Special Issue: AESPMLESDP** " as the article type, from the manuscript type menu during the submission process.

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