

Tentative Outline

Special Thematic Issue for Current Medical Imaging

Title: Medical Image and Bio-signal Processing Using Machine Learning

Guest Editor: *Dr. Heye Zhang*

Aims & Scope:

Nowadays, millions of people are affected by different diseases worldwide, whereas a considerable amount of them could be aided through medical image diagnosis or bio-signal processing, which involves the study of a number of fatal diseases, being the use computer-aided diagnosis systems, more considered to carried out the task of processing image and bio-signal data by means of machine learning and signal processing and analysis techniques.

The machine learning in medical image and bio-signal process has been widely studied in the last years in order to aid the diagnose of different diseases. One way to perform this type of test is to conduct a large-scale experiment in multiple clinical centers in order to verify the performance of machine learning algorithm. However, the posterior task of analyzing such data may be tiresome and more prone to errors when

Interpreted by human beings, since there is a large/huge amount of information to be processed. In order to cope with such problem, many works have been carried out different algorithms by means of Computational Intelligence techniques.

This Special Issue focuses on recent advances and future trends in methods and applications of approaches considered in medical image and bio-signal processing. We invite researchers to contribute original work related to this special issue.

Keywords: Medical image, bio-signal processing, fatal diseases, machine learning algorithm, recent advances.

Subtopics:

The subtopics to be covered within this issue are listed below:

Potential topics include, but are not limited to:

- Acquisition of bio-signal processing
- Signal Processing Techniques
- Image Processing Techniques
- Internet of Things Applications
- Diseases Prediction
- Automatic Real Time Detection in bio-signal
- Diagnosis of fatal Disease
- Communication Protocol for medical data

Schedule:

- ✧ Manuscript submission deadline: Sep 20, 2020
- ✧ Announcement of acceptance by the Guest Editors: Feb 20, 2021

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