Special Issue

Advanced Machine Learning for Bio-Signal Processing and Health Monitoring

Message from the Guest Editor

Brain-computer Interface (BCI) is a technology that has been introduced to improve the quality of life for people with disabilities or difficulties in their daily lives. BCI studies are not limited to the EEG signals, indeed other biosignals such as EMG, ECG, and GSR are beneficial in BCI applications. BCI has the potential to be used in many applications based on biosignals.

Some challenges in the field are related to the identification of patterns generated in EEG signals due to motion intention or motion imagination, called event-related synchronization and desynchronization (ERD/ERS).

BCI and rehabilitation projects have different limitations. This collection of articles aims to highlight mathematical innovations as well as new ideas for designing tasks to induce the brain to generate distinctive neuronal patterns. The final goal of this research Topic is the discovery of new methods for BCI applications. We welcome manuscripts on the following subtopics:

- Decoding brain neuron activities by developing mathematical methods for identifying patterns within the EEG signals automatically
- Identifying EEG patterns relative to human actions and decisions automatically

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Deadline for manuscript submissions

31 January 2026



Life

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed



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Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

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