

## Special Issue

# EEG Signal Processing in Medical Diagnosis Applications

### Message from the Guest Editors

Electroencephalography (EEG) is a technique for recording the brain's electrical activity, widely used in medical diagnostics. EEG signals are measured using electrodes placed on the scalp, allowing the real-time assessment of brain function. Due to its non-invasiveness, relatively low cost, and diagnostic value, EEG is applied across various medical fields, including neurology, psychiatry, and anesthesiology. The scope of this Special Issue includes the following research areas:

- Methods for EEG signal processing and analysis
- Machine learning and deep learning methods for EEG signal analysis and pattern detection
- Comparative studies on the effectiveness of various EEG processing and analysis methods in medical diagnostics
- Development of modern decision support systems (DSSs)
- Innovative pattern detection methods for identifying exceptional features in EEG signals
- Applications in personalized medicine and bioinformatics
- EEG applications in the diagnosis of neurological diseases
- EEG applications in rehabilitation and therapy
- Design of devices for EEG data acquisition
- Development of open-source platforms and tools for EEG signal analysis
- Applications of real-time systems in EEG signal processing

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### Deadline for manuscript submissions

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

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