Special Issue

Advances in Artificial Intelligence and Machine Learning for BCI/BMI

Message from the Guest Editors

The brain–computer interface (BCI), also called the brain–machine interface (BMI), is an emerging technology involving software and hardware communication systems allowing the use of brain activity to control external devices such as computers, robots, and machines. BCI systems translate the activity of the brain to conduct an action or a command that will be executed by the external device. Artificial intelligence (AI)/machine learning (ML) has received great attention for the development of BCI applications to solve difficult problems in several domains, in particular, medical and robotic fields. AI/ML has since become the most efficient tool for BCI systems. This Special Issue aims to solicit original research papers as well as review articles focusing on recent advances in AI/ML for BCI research. The main topics include, but are not limited to, the following:

- Brain–computer interface (BCI)/Brain–machine interface (BMI)
- Artificial intelligence in BCI/BMI
- Machine learning in BCI/BMI
- Deep learning in BCI/BMI
- Brain signal processing for BCI/BMI
- Neurofeedback
- Neural Rehabilitation Engineering
- Related applications

Guest Editors

Prof. Dr. Larbi Boubchir

LIASD Research Lab., University of Paris 8, 2 Rue de la Liberté, 93526 Saint-Denis, France

Prof. Dr. Yuling Yan

School of Engineering, Santa Clara University, Santa Clara, CA 95053, USA

Deadline for manuscript submissions

closed (31 December 2020)

About the Journal

Message from the Editor-in-Chief

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Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie
Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

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