Special Issue

Machine Learning and Its Application in Neuroscience and Brain–Computer Interfaces

Message from the Guest Editors

Recent technological innovations have led to substantial disruptions in fields like medicine and healthcare, patient monitoring, and telemedicine. Brain–computer interfaces are a novel and highly significant technology that establishes an information-sharing pathway between an external device such as a computer and the electrical signals in the brain. With this technology, it is possible for even a paralyzed patient to communicate their thoughts to a computer. The technology is made possible through three common methods that define how the electrodes make contact with the brain tissues. These methods are invasive (microelectrode array), partially invasive (endovascular and ECoG), and non-invasive (MRI, EEG, EOG, MEG).

Topics of interest for this SI include, but are not limited to, the following:

Convolutional neural networks (CNNs) for neuroimaging applications.

Development of a brain–computer interfaces by integrating machine learning approaches with Riemannian geometry.

Methods to enhance motor imagery classification using machine learning for brain–computer interfaces.

...

Guest Editors

Dr. Dinesh Jackson Samuel
Biomedical Engineering, University of California, Davis, CA 95616, USA

Prof. Dr. Seifedine Kadry
Department of Applied Data Science, Norrof University College, 4608 Kristiansand, Norway

Deadline for manuscript submissions

closed (15 November 2023)

Brain Sciences

an Open Access Journal by MDPI

**Impact Factor 2.8
CiteScore 5.6
Indexed in PubMed**

mdpi.com/journal/
brainsci

About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

Editor-in-Chief

Prof. Dr. Stephen D. Meriney
Department of Neuroscience, University of Pittsburgh, Pittsburgh, PA 15260, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, PSYNDEX, PsycInfo, CAPlus / SciFinder, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.2 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.

MDPI