Special Issue

Applications of Deep Learning and Generative AI in Neuro-Medicine and Brain-Centric Interfaces

Message from the Guest Editor

Advancements in AI—especially deep learning, transformers, and generative AI—are rapidly reshaping neuro-medicine and brain–computer interfaces (BCI). This Special Issue invites high-quality studies at the intersection of AI and neuro-medicine, focusing on cognitive health, neurological disorders, and BCI. We welcome research applying AI to EEG, fNIRS, MRI, eye-tracking, EMG, and wearable devices. Topics include epilepsy detection, stroke prediction, ASD analysis, cognitive workload modeling, neurodevelopmental and neurodegenerative assessments, and real-time BCI systems. We seek contributions on multi-modal neural data, low-channel EEG prediction, transfer learning, and explainable AI in clinical settings. Work combining methodological advances with real-world applications, such as hybrid models, LLMs for neuro-diagnostics, and privacy-preserving systems, is highly encouraged. We welcome original articles, reviews, and short communications.

Guest Editor

Dr. Adham Atyabi

Department of Computer Science, University of Colorado, Colorado Springs, CO, USA

Deadline for manuscript submissions

20 May 2026

AI

an Open Access Journal by MDPI

Impact Factor 5.0
CiteScore 6.9

mdpi.com/si/245384

AI
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ai@mdpi.com

mdpi.com/journal/ai

AI

an Open Access Journal by MDPI

Impact Factor 5.0
CiteScore 6.9

mdpi.com/journal/ai

About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Kenji Suzuki
Biomedical Artificial Intelligence Research Unit (BMAI), Institute of Integrated Research, Institute of Science Tokyo, Yokohama 226-8501, Japan

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within ESCI (Web of Science), Scopus, EBSCO, and other databases.

Journal Rank:

JCR - Q1 (Computer Science, Interdisciplinary Applications) / CiteScore - Q2 (Artificial Intelligence)

MDPI