



an Open Access Journal by MDPI

# **Recent Advance of Machine Learning in Biomedical Image Analysis**

Guest Editors:

#### Dr. Zhiming Luo

The Department of Artificial Intelligence, Xiamen University, Xiamen, China

#### **Dr. Sheng Lian**

College of Computer and Data Science, Fuzhou University, Fuzhou, China

Deadline for manuscript submissions: closed (31 December 2023)



mdpi.com/si/168516

Message from the Guest Editors

In recent years, the field of biomedical image analysis has gained significant importance due to the growing availability of medical imaging data and the need for accurate and efficient analysis. Machine learning (ML) techniques have emerged as a promising solution to address these challenges, and have been widely used in various applications, such as computer-aided diagnosis, medical image segmentation, registration, retrieval, classification, etc. With an increase in data volume, advanced ML techniques are becoming increasingly important in biomedical image analysis.

This Special Issue aims to present the latest research developments in machine learning applied to biomedical image analysis. The topics of interest include but are not limited to:

- Semantic segmentation of medical images;
- Computer-aided detection and diagnosis;
- Learning from weak or noisy annotations;
- Transfer learning and domain adaptation;
- Uncertainty estimation for medical diagnosis;
- Unsupervised deep learning and representation learning;
- Transformer-based medical image analysis method;
- Deep learning applications in radiology, pathology, endoscopy, dermatology, ophthalmology, and beyond.







an Open Access Journal by MDPI

## **Editor-in-Chief**

### Message from the Editor-in-Chief

### Prof. Dr. Anthony Guiseppi-Elie

Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

# **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases. **Journal Rank:** JCR - Q2 (*Engineering, Biomedical*)

### **Contact Us**

*Bioengineering* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/bioengineering bioengineering@mdpi.com X@Bioeng\_MDPI