Special Issue

Advanced Technologies in Medical Image Processing and Analysis

Message from the Guest Editors

This Special Issue (SI) will show the recent progress of AT research in medical image analysis and clinical applications. It will also discuss the existing problems in the field and provide possible solutions and future directions. More specifically, it will highlight state-of-the-art clinical applications that include four major human body systems: the nervous system, the cardiovascular system, the digestive system, and the skeletal system. Overall, according to the best available evidence, deep learning models perform well in medical image analysis; however, algorithms derived from small-scale medical datasets that impede clinical applicability cannot be ignored. Future directions could include federated learning, benchmark dataset collection, and utilizing domain subject knowledge as priors. In conclusion, recent advanced deep learning technologies have achieved great success in medical image analysis due to their high accuracy, efficiency, stability, and scalability. Technological advancements that can alleviate the high demands on high-quality, large-scale datasets could be a future development in this area.

Guest Editors

Dr. Chen Li

College of Medicine and Biological Information Engineering, Northeastern University, Shenyang 110169, China

Prof. Dr. Marcin Grzegorzek

Institute of Medical Informatics, University of Lübeck, Ratzeburger Allee 160, 23562 Lübeck, Germany

Deadline for manuscript submissions

closed (20 April 2023)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/138142

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

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)