

Special Issue

Building Generalizable Deep Learning Model for Medical Image Analysis for Multi-Center/Multi-Scanner Data

Message from the Guest Editors

In this Special Issue, we will explore the following topics:

(1) Recent one-shot/few-shot learning developments for medical image classification/segmentation using a minimal number of labelled images. (2) Generative adversarial networks (GAN)/auto-encoder-based data augmentation for building generalizable deep learning models. (3) Federated learning (FL) to collaboratively train deep-learning models using isolated patient data owned by different hospitals for various clinical applications, including medical image segmentation. (4) Transfer-learning models targeting a small quantity of labelled data and trained model performance in large datasets. (5) Evaluation of deep-learning/transfer-learning models in multicenter, multis scanner datasets. (6) Evolution of performance differences/transfer learning in deep-learning models in patients and healthy subjects. (7) Noise reduction in old MRI/CT scans to improve the performance of deep-learning models using GAN for longitudinal data analysis. ***We look forward to receiving your contributions!!!***

Guest Editors

Dr. Sibaji Gaj

Dr. Shuvendu Rana

Dr. Nilkanta Sahu

Dr. Barath Narayanan

Deadline for manuscript submissions

closed (15 May 2023)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/139188

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

[mdpi.com/journal/
electronics](https://mdpi.com/journal/electronics)





Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



[mdpi.com/journal/
electronics](https://mdpi.com/journal/electronics)



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di
Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus /
SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) /
CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is
provided to authors approximately 16.8 days after
submission; acceptance to publication is undertaken in 2.4
days (median values for papers published in this journal in
the first half of 2025).