

Special Issue

Machine and Deep Learning: Beyond Computational and Data-Related Limitations

Message from the Guest Editors

This Special Issue aims to investigate innovative solutions to overcome two major obstacles in current AI technology: the lack of properly labeled data and the lack of storage and computational capacity on lightweight and embedded systems. We encourage authors to submit papers within different domains with or without industrial applications. This Special Issue aims to cover recent advances in DNN architecture compression and edge deployment on the one hand, and advances in unsupervised learning, self-/semi-supervised learning, multimodal learning, explainable deep learning, active learning and continuous learning on the other hand. Reviews and surveys on the state-of-the-art DNN architectures are also welcomed. The topics of interest for this Special Issue include:

- DNN software compression;
- DNN hardware compression;
- DNN pruning and quantization;
- Knowledge distillation;
- Model deployment in edge and cloud architectures;
- Edge artificial intelligence;
- Unsupervised learning;
- Semi-supervised and self-supervised learning;
- Active learning;
- Explainable deep learning;
- Continual learning;
- Knowledge transfer;
- Lifelong learning.

Guest Editors

Dr. Matei Mancas

Numediart Institute of Creative Technologies, University of Mons (UMONS), 7000 Mons, Belgium

Prof. Dr. Sidi Ahmed Mahmoudi

Faculty of Engineering, University of Mons, 7000 Mons, Belgium

Deadline for manuscript submissions

closed (30 June 2024)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/168072

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 guest-edited 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), CAPus /
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).