

## Special Issue

# Convolutional Neural Networks and Vision Applications, 4th Edition

### Message from the Guest Editors

This Special Issue is reserved for research related to the design, optimization, and implementation of machine-learning-based vision algorithms or convolutional neural networks that are suitable for real-time vision applications. General topics covered in this Special Issue include the following:

- Optimization of software-based vision algorithms;
- CNN architecture optimizations for real-time performance;
- CNN acceleration through approximate computing;
- CNN applications that require real-time performance;
- Tradeoff analysis between speed and accuracy in CNN;
- GPU-based implementations for real-time CNN performance;
- FPGA-based implementations for real-time CNN performance;
- Embedded vision systems for applications that require real-time performance;
- Machine vision applications that require real-time performance.

### Guest Editors

Prof. Dr. D. J. Lee

450 Engineering Building, Department of Electrical and Computer Engineering, Brigham Young University, Provo, UT 84602-4099, USA

Dr. Dong Zhang

School of Electronics and Information Technology, Sun Yat-sen University, Guangzhou 510006, China

### Deadline for manuscript submissions

20 December 2025



## Electronics

an Open Access Journal  
by MDPI

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/si/227883](https://mdpi.com/si/227883)

*Electronics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[electronics@mdpi.com](mailto: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).