

## Special Issue

# Advanced Pattern Recognition & Computer Vision

### Message from the Guest Editors

Pattern recognition and computer vision are long-term research hotspots, which have a wide range of application scenarios in real life. Recently, deep learning has become the core technology for pattern recognition and computer vision tasks. Although these deep learning models have achieved remarkable success in fields such as multimedia data recognition and analysis, the existing technology mainly has a promising performance from a data-driven perspective. Therefore, advanced pattern recognition and computer vision methods are urgently needed in relevant research fields. Topics of interest include but are not limited to:

- Image classification and segmentation;
- Object detection and tracking;
- Image understanding and scene analysis;
- Image denoising and reconstruction;
- Psychophysical analysis of visual perception;
- Image generation and super-resolution;
- Visual data reduction and compression;
- Deep learning for computer vision tasks (medical image processing, remote sensing, hyperspectral imaging, thermal imaging);
- Multimedia affective computing;
- RGB-D and 3D processing;
- Interpretable deep learning models.

---

### Guest Editors

Prof. Dr. Rui Yao

School of Computer Science and Technology, China University of Mining and Technology, Xuzhou 221116, China

Dr. Hancheng Zhu

School of Computer Science and Technology, China University of Mining and Technology, Xuzhou 221116, China

---

### Deadline for manuscript submissions

closed (20 June 2025)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/137401](https://mdpi.com/si/137401)

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

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





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



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



## 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, Embase, CAPIus / SciFinder, and other databases.

#### Journal Rank:

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