



## Neural Networks for Feature Extraction

Guest Editors:

**Dr. Zhen Cao**

School of Artificial Intelligence,  
Xidian University, Xi'an 710071,  
China

**Dr. Zhang Guo**

Academy of Advanced  
Disciplinary Research, Xidian  
University, Xi'an 710071, China

Deadline for manuscript  
submissions:

**15 January 2025**

### Message from the Guest Editors

Neural networks have been widely used in feature extraction tasks, and current research focuses on the following aspects: improving the effectiveness of feature learning, e.g., through regularization and pre-training; and designing new neural network structures to learn more abstract and efficient features, e.g., convolutional neural networks, recurrent neural networks, and spike neural networks.

Combining neural networks with other methods can be carried out to form a more powerful feature learning framework.

In summary, neural networks have the advantages of automatically learning features, learning abstract features, good feature generalization, and convergence to stable features, which often make the features learned by neural networks more powerful than artificial features and widely applicable to downstream tasks. Neural networks provide a powerful tool for feature learning and representation.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Flavio Canavero**

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

## 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.

## 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), CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Control and Systems Engineering*)

## Contact Us

---

Electronics Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/electronics](http://mdpi.com/journal/electronics)  
[electronics@mdpi.com](mailto:electronics@mdpi.com)  
[X@electronicsMDPI](https://x.com/electronicsMDPI)