

Special Issue

Computational Methods and Applications of Neural Networks

Message from the Guest Editor

The Special Issue aims to explore the latest advancements and innovations in the field of computational methods and applications of neural networks. Recent major neural networks include Mamba-based frameworks. These frameworks excel in speech recognition, time series analysis, and natural language understanding. In addition, Swin Transformer and SegFormer are important models for visual tasks, which enable 3D scene reconstruction and real-time semantic segmentation.

Applications of neural networks exist across diverse fields. However, the escalating scale and complexity of models present unprecedented challenges in computational efficiency, resource consumption, training stability, and deployment feasibility. This Special Issue aims to curate cutting-edge research that addresses these challenges through foundational advances in the computational and algorithmic principles of neural networks. We seek original contributions that introduce novel methods, provide rigorous theoretical analysis, and demonstrate significant improvements in the efficiency, scalability, and capability of neural models.

Guest Editor

Dr. Wuman Luo

Faculty of Applied Sciences, Macao Polytechnic University, Macao 999078, China

Deadline for manuscript submissions

30 June 2026



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/253679

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

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





Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



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



About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and Informatics, De Montfort University,
The Gateway, Leicester LE1 9BH, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).