

Special Issue

Mathematical Approaches to Advanced Applications in Biomedicine Using Machine Learning

Message from the Guest Editor

Machine learning has found numerous applications in the field of biomedicine, tackling complex problems such as predicting 3D structures of proteins, deciphering intricate genetic regulatory networks, and assisting in medical decisions, such as diagnosing diseases and recommending personalized treatment plans. These applications highlight the potential of ML to revolutionize and significantly enhance various facets of biomedicine. With great enthusiasm, we would therefore like to announce our forthcoming Special Issue, named "Mathematical Approaches to Advanced Applications in Biomedicine Using Machine Learning". Topics include but are not limited to:

- Novel machine learning algorithms for analyzing complex biological data such as genetics, genomics, and proteomics;
- ML algorithms for the integration of multimodal data in bioinformatics;
- Machine learning-driven drug discovery and development;
- Disease diagnosis, prognosis, and treatment recommendations using AI;
- Applications of ML methods to clinical decisions such as disease diagnosis and treatment recommendations;

Guest Editor

Dr. Mehmet Eren Ahsen

1. Gies College of Business, University of Illinois at Urbana-Champaign, Champaign, IL, USA
2. Department of Biomedical and Translational Sciences, Carle Illinois School of Medicine, Urbana, IL, USA

Deadline for manuscript submissions

31 October 2025



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/182422

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 18.4 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).