Special Issue

Mathematical Foundations and Practical Applications of Data Mining and Deep Learning

Message from the Guest Editor

We invite high-quality research and review articles that address the following topics:

- Mathematical Foundations in Smart Industry and Automation: Optimization algorithms and mathematical modeling for predictive maintenance, digital twins, and process optimization;
- Computational Methods in AI for Healthcare:
 Probabilistic modeling and statistical learning for medical imaging, disease prediction, and AI-assisted diagnostics;
- Mathematical Finance and Business Analytics: Risk assessment, fraud detection, and market analysis using optimization techniques and time-series modeling;
- Mathematical Modeling for Energy and Sustainability: Smart grid optimization and renewable energy forecasting using graph theory and statistical methods:
- Optimization and AI in Logistics and Supply Chain: Route optimization, demand forecasting, and autonomous transportation through reinforcement learning and mathematical programming;
- Mathematical Approaches to Cybersecurity and Privacy: Al-driven anomaly detection, cryptanalysis, and privacy-preserving Data Mining with advanced statistical frameworks.

Guest Editor

Dr. Sekyoung Youm

Department of Industrial and Systems Engineering, Dongguk University, Seoul 40620, Republic of Korea

Deadline for manuscript submissions

20 January 2026



Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/238992

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

mdpi.com/journal/mathematics





Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



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).

