Special Issue

Mathematical Optimization in Machine Learning, Computer Vision, and Data Mining, 2nd Edition

Message from the Guest Editor

This Special Issue welcomes scientific manuscripts on two relevant topics for mathematical optimization in machine learning, computer vision, pattern recognition, and data mining.

- The adaptation of existing optimization techniques from mathematics or the development of novel approaches for addressing interesting problems in machine learning, computer vision, pattern recognition, and data mining. This includes improvements to existing machine learning, deep learning, computer vision pattern recognition, and data mining algorithms. Improvements can include, but are not limited to, faster convergence rates, improved bounds, improved efficiency or memory consumption, better performance, etc. Improvements should be significant and demonstrated by corresponding empirical and theoretical evaluation.
- The design of novel machine learning, computer vision pattern recognition, or data mining approaches to solve a specific domain task. The approach should not be a simple adaptation of existing algorithms to novel data. Proposed improvements must be supported by appropriate experiments and rigorous explanations of why existing approaches are not applicable.

Guest Editor

Dr. Valsamis Ntouskos

Remote Sensing Lab, School of Rural, Surveying and Geoinformatics Engineering, National Technical University of Athens, 15780 Athens, Greece

Deadline for manuscript submissions

30 April 2026

Σ

Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6

MDPI

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).