Special Issue

Mathematical Methods for Machine Learning and Computer Vision

Message from the Guest Editor

Recent decades have witnessed the rapid developments of machine learning and computer vision, as well as their huge influence in many fileds such as image recognition and classification, automatic driving, industrial manufacturing, medical imaging, to name a few. One of the crucial challenge in machine learning and computer vision is the development and utilization of different kinds of models and algorithms building bridges between data and the potential tasks. Over the past two decades, a number of mathematical methods represented by compressed sensing, high-order tensor modeling, and alternating direction method of multipliers, have been well developted to help construct the desired models and algorithms in machine learning and computer vision. This Special Issue focuses on the significant developments on the machine learning and computer vision, especially on their mathematical methods on related models and algorithms, including but not limited to those in the following topics: image recognition and classification, sparse/low-rank subspace clustering, convex clustering, compressed sensing, recommendation system, matrix/tensor completion, robust principal components analysis.

Guest Editor

Prof. Dr. Jianjun Wang

School of Mathematics and Statistics, Southwest University, Chongqing 400715, China

Deadline for manuscript submissions

31 May 2026

MDPI

Σ

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).

MDPI