Special Issue

Advanced Algorithm for Clustering: Optimization and Applications

Message from the Guest Editors

Clustering is a fundamental unsupervised machine learning problem which tries to handle increasingly complex and large-scale datasets across diverse domains, and thus has attracted much attention. This Special Issue aims to showcase cutting-edge research that pushes the boundaries of clustering methodologies, optimization techniques, and their practical applications. The issue brings together innovative contributions that address key challenges in clustering, such as scalability, robustness, interpretability, and adaptability to high-dimensional and heterogeneous data. Topics of interest include, but are not limited to, novel clustering algorithms, optimizationdriven approaches, deep learning-based clustering, ensemble methods, and applications of clustering in areas like bioinformatics, social network analysis, image segmentation, and beyond.

Guest Editors

Prof. Dr. Pena Zhou

School of Computer Science and Technology, Anhui University, Hefei 230601, China

Dr. Liang Du

School of Computer and Information Technology, Shanxi University, Taiyuan 030006, China

Deadline for manuscript submissions

31 December 2025



Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/238811

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).

