Special Issue

Methods and Applications of Machine Learning and Big Data Analytics

Message from the Guest Editors

Machine learning has become a very popular topic in recent years, particularly with the development of deep learning and the emergence of big data everywhere. It is thus important to study machine learning methods for analyzing big data and to develop specific machine learning methods for certain applications of big data. This Special Issue will focus on new methods and applications of machine learning and big data analytics. Topics of interest include, but are not limited to, the following:

- Novel machine learning methods for big data analytics;
- Applications of machine learning for specific big data analytics, such as life science, health informatics, biomedical data, social network, omics data, etc.;
- Deep learning for big data analytics;
- Graph neural networks for big data analytics;
- Feature selection for big data analytics;
- Unsupervised learning for big data analytics;
- Meta learning for big data analytics;
- Quantum machine learning for big data analytics.

Any related machine learning methods for big data analytics and cross-border applications in science and engineering are also welcome in this Special Issue.

Guest Editors

Prof. Dr. Verena Kantere

School of Electrical Engineering and Computer Science, University of Ottawa, Ottawa, ON, Canada

Prof. Dr. Juanying Xie

School of Computer Science, Shaanxi Normal University, Xi'an 710119, China

Deadline for manuscript submissions

10 November 2025



Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/207219

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).

