

Special Issue

Artificial Intelligence, Algorithms, and Databases: Innovations and Cross- Disciplinary Impact

Message from the Guest Editors

Data-driven intelligent learning algorithms and deep learning models leverage information from databases, including time-series data, to solve optimization problems in industrial engineering and design. These approaches, utilizing metaheuristic algorithms and deep models, are widely applied in 5G communications, wireless sensor networks, scheduling, and logistics to enhance efficiency. These methods include bio-inspired algorithms, evolutionary computation, swarm intelligence, and deep learning models such as CNNs, RNNs, LSTMs, GANs, and Transformers. Unlike traditional optimization techniques, they do not require functions to be continuous or differentiable—only an evaluable objective or loss function. This flexibility allows them to address complex challenges like optimizing network infrastructure, managing sensor networks, refining transit scheduling, and streamlining logistics. No single solution works universally, but data-driven AI approaches, combined with expert knowledge, offer powerful tools for tackling real-world problems.

Guest Editors

Dr. Junfeng Chen

Dr. Shi Cheng

Prof. Dr. Xiaohui Yan

Dr. Sicheng Hou

Deadline for manuscript submissions

30 June 2026



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/230715

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

[mdpi.com/journal/
mathematics](https://mdpi.com/journal/mathematics)





Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



[mdpi.com/journal/
mathematics](https://mdpi.com/journal/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 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).