Special Issue

Metaheuristics Deep Learning for Computer Vision and Image

Message from the Guest Editors

This Special Issue aims to investigate the use and development of algorithms involving metaheuristic methods and all types of deep models in applications that solve computer vision and image processing problems.

TOPICS

We would like to invite researchers to submit contributions on the topic from all viewpoints, including theoretical issues, algorithms, systems, and applications. The Special Issue will cover the following possible topics:

- Image processing, e.g., image enhancement, image compression, image restoration, and image reconstruction;
- Edge detection;
- Image segmentation;
- Object detection;
- Image classification;
- Object tracking;
- Medical image analysis;
- Image denoising;
- Video analysis;
- Neural architecture search;
- Optimizing parameters of deep neural networks;
- Optimizing loss functions of deep neural networks;
- Surrogate-assisted evolutionary deep learning methods;
- Multiobjective metaheuristic deep learning methods;
- Computationally efficient metaheuristic deep learning methods;
- Any other emerging topics in metaheuristic deep learning.

Guest Editors

Prof. Dr. Amir Nakib Laboratoire LISSI, University Paris Est Creteil, 94000 Creteil, France

Prof. Dr. Abdelmalik Taleb-Ahmed UMR 8520-IEMN, University Polytechnique Hauts-de-France, University Lille, CNRS, Centrale Lille, F-59313 Valenciennes, France

Deadline for manuscript submissions



an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/168810

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

mdpi.com/journal/ mathematics



Σ

Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



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).