



Mathematics in Machine Learning-Based Image Processing with Their Applications

Guest Editors:

Dr. Joanna Czajkowska

Dr. Jan Juszczak

Dr. Joanna Jaworek-Korjakowska

Deadline for manuscript
submissions:
closed (31 October 2024)

Message from the Guest Editors

Dear Colleagues,

In recent years, we have observed the rapid development of artificial intelligence, especially deep learning architectures within the machine learning research area, being a part of Mathematical Sciences. It has resulted in the increased accuracy of novel solutions as observed in ImageNet challenges. Therefore, machine learning-based algorithms comprise multiple applications in the field of computer vision, especially image-processing tasks in areas that include medical image analysis, autonomous driving, robotic vision, and cybersecurity. These techniques are commonly used for image pre-processing, registration, detection, segmentation, classification, reconstruction, retrieval, and feature extraction. Being robust and repeatable, they appropriately support the scientist in his or her daily work.

This Special Issue aims to collect all the works reflecting the latest developments in machine learning, emphasizing their usage in image analysis. We invite the authors to submit original articles addressing the significant issues and new concepts in the field of image processing.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and
Informatics, De Montfort
University, The Gateway,
Leicester LE1 9BH, UK

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank: JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Contact Us

Mathematics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/mathematics
mathematics@mdpi.com
[X@MathematicsMDPI](https://twitter.com/MathematicsMDPI)