

# Special Issue

## New Trends in Computer Vision, Deep Learning and Artificial Intelligence

### Message from the Guest Editors

In the past decade, deep learning algorithms have dominated in speech, computer vision, and natural language processing, and AI applications have been everywhere in our daily lives. Identifying ways to extend AI capabilities to tasks with limited data available and other complex tasks will be particularly important for the next decade. The purpose of this Special Issue is to gather a collection of articles reflecting new trends in computer vision, deep learning, and artificial intelligence. Topics include but are not limited to the following:

- Deep learning with limited data;
- Unsupervised deep learning technology;
- Deep learning for 3D vision;
- Neural rendering and its applications;
- Deep learning for efficient detection and segmentation;
- Deep learning for video understanding;
- Deep learning for language-vision tasks;
- Deep learning for visual affective computing;
- Deep learning for medical image analysis;
- Deep learning training acceleration;
- Big AI models;
- Industrial AI applications.

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### Guest Editors

Dr. Xiaojiang Peng

Prof. Dr. Linlin Shen

Prof. Dr. Yang You

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### Deadline for manuscript submissions

closed (31 January 2025)



## Mathematics

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*Mathematics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[mathematics@mdpi.com](mailto:mathematics@mdpi.com)

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## 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.

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### Editor-in-Chief

Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University,  
The Gateway, Leicester LE1 9BH, UK

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