

Special Issue

Recent Advances in Deep Learning Algorithms for Computer Vision and Image Analysis

Message from the Guest Editor

Computer vision is a driving force of modern technology, enabling automation, intelligent systems, and human-machine interaction to tackle real-world challenges. Powered by deep learning, it allows machines to interpret and understand visual information, opening new opportunities for science, engineering, and society. This Special Issue welcomes innovative research at the intersection of engineering, computer science, and related disciplines. Topics include deep neural networks, convolutional and transformer-based architectures, image segmentation, object detection, image enhancement, 3D reconstruction, multimodal data fusion, and explainable AI in vision. We particularly invite studies applying computer vision to robotics, industrial automation, biomedical engineering, smart cities, and intelligent transportation. Contributions exploring the role of vision and image analysis in digital twins—supporting virtual models, validation, and simulation—are also encouraged. Submissions may present novel methodologies, theoretical advances, or impactful applications across engineering fields, fostering both experimental and interdisciplinary insights.

Guest Editor

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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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