

Special Issue

Machine Learning in Computer Vision and Image Processing

Message from the Guest Editor

The Special Issue delves into the transformative role of machine learning (ML) in advancing the fields of computer vision and image analysis. Key topics include deep learning architectures like convolutional neural networks (CNNs) and transformers, which have revolutionized tasks such as object detection, image segmentation, and facial recognition. This Special Issue also explores applications in medical imaging, autonomous vehicles, surveillance, and augmented reality, where ML-driven solutions improve accuracy, efficiency, and real-time processing capabilities. Challenges such as data scarcity, model interpretability, and computational efficiency are addressed, alongside emerging trends like self-supervised learning, generative adversarial networks (GANs), and edge AI for on-device processing. By bridging theoretical research and practical applications, this Special Issue aims to showcase how machine learning is pushing the boundaries of what is possible in computer vision and image processing, paving the way for smarter, more adaptive

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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