Special Issue

Computer Vision and Pattern Recognition: Advanced Techniques and Applications

Message from the Guest Editors

Computer vision and pattern recognition are driving transformative advances across many domains, from healthcare and autonomous vehicles to robotics and augmented reality. The last few years have seen advances in vision transformers, foundational models, 3D scene understanding, explainability, and self-supervised models. Advances in computer vision and pattern recognition have the potential to make positive impacts in related fields. This Special Issue seeks to showcase the most innovative and impactful research in this rapidly evolving landscape. We invite submissions on a broad range of topics, including but not limited to:

- Deep learning for computer vision;
- Object detection and recognition;
- Image and video analysis;
- 3D vision and reconstruction;
- Scene understanding and segmentation;
- Sensor fusion for 3D scene understanding;
- Pattern recognition and machine learning;
- Robotics and vision-based navigation;
- Medical imaging and healthcare applications;
- Autonomous vehicles and drones;
- Human–computer interactions;
- Vision transformer and applications;
- Foundational models and applications.

Guest Editors

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About the Journal

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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