Special Issue

AI-Driven Computer Vision and Pattern Recognition: Challenges and Applications

Message from the Guest Editors

The integration of computer vision technologies into urban environments marks the dawn of a groundbreaking era in smart city innovation. By harnessing the power of advanced imaging and analytics, cities around the world are being transformed into more efficient, sustainable, and livable communities. This Special Issue is dedicated to exploring the cutting-edge applications of computer vision within the smart city paradigm, seeking to illuminate pioneering research, inventive methodologies, and groundbreaking technologies that are propelling urban innovation forward. Contributions are sought that push the boundaries of current knowledge and practice, including but not limited to:

- Advancements in computer vision algorithms for urban applications;
- Integration of computer vision in urban infrastructure management;
- Computer vision for urban environmental protection and sustainability;
- Enhancing urban safety and security with computer vision;
- Smart transportation systems powered by computer vision;
- Public space and crowd management solutions;
- Impact of computer vision on urban planning and governance.

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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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