Special Issue

AI-Based Computer Vision Sensors & Systems

Message from the Guest Editors

Artificial intelligence (AI) in computer vision sensors and systems is a specialized field that encompasses both current and historical AI advancements, as well as their potential impacts and future prospects within sensor technology and its applications. This Special Issue explores the innovative landscape of AI-based computer vision sensors and systems, emphasizing their transformative potential across a variety of applications. These technologies harness advanced imaging techniques to facilitate real-time analysis and intelligent decision-making. We invite researchers to submit original articles investigating the use of RGB cameras, depth cameras (e.g., LiDAR), and thermal cameras in conjunction with image processing units (GPUs, TPUs, FPGAs) and object detection frameworks (e.g., YOLO, SSD, Faster R-CNN) in areas such as environmental monitoring, healthcare imaging, autonomous navigation, and security systems. This issue aims to highlight innovative methodologies that enhance object detection, gesture recognition, and real-time analytics, ultimately advancing the capabilities of computer vision.

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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