Special Issue

Event-Based Vision Technology: From Imaging to Perception and Control

Message from the Guest Editors

Event-based vision technology has emerged as a transformative approach in the field of computer vision and sensing, moving beyond traditional frame-based imaging to capture and process visual information in a more efficient and biologically inspired manner. This Special Issue aims to highlight these recent developments and innovations, from imaging to information perception and control systems. Areas of interest for this Special Issue include, but are not limited to, the following:

- Event-based sensor designs and architectures;
- Event-based algorithms for filtration, motion estimation, object detection, object tracking, and scene reconstruction;
- Neuromorphic computing and hardware implementations for event-based vision;
- Its applications in robotics, autonomous vehicles and drones, advanced driver assistance systems, augmented reality, and human–computer interactions;
- Biomedical and scientific applications, such as retinal prosthetics, high-speed imaging, and microscopy;
- The integration of event-based vision with other sensing modalities and machine learning techniques;
- Benchmarking and evaluation methods for event-based vision systems.

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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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