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 eventbased vision systems.

Guest Editors

Dr. Tomasz Kryjak

Department of Automatic Control and Robotics, AGH University of Science and Technology, 30-962 Kraków, Poland

Dr. Thomas Mesquida

Department of Digital Integrated Systems and Circuits (LIST), Université Grenoble-Alpes, 38400 Grenoble, France

Deadline for manuscript submissions

10 December 2025



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/233287

Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

mdpi.com/journal/ sensors





Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



About the Journal

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.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)

