

# Special Issue

## New Trends in Robot Vision Sensors and System

### Message from the Guest Editor

This Special Issue, entitled "New Trends in Robot Vision Sensors and System", aims to showcase the latest advancements and innovative applications of robot vision technologies, with a particular focus on their impact in challenging environments such as coal mining.

It seeks to explore how novel vision sensors, advanced perception algorithms, and integrated system designs are enhancing robotic capabilities in object detection, scene understanding, and autonomous navigation. Topics of interest include intelligent sensing for specialized robots, multi-sensor fusion, 3D vision, SLAM in complex and unstructured environments, and the integration of AI for robust visual perception. We welcome contributions that present new methodologies, system architectures, and case studies that push the boundaries of what is possible with robot vision.

### Keywords:

- robot vision sensors
- intelligent sensing
- multi-sensor information fusion
- object detection
- SLAM
- artificial intelligence
- autonomous systems
- perception
- 3D vision
- mining robotics

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### Deadline for manuscript submissions

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## Sensors

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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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### Editor-in-Chief

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