# **Special Issue**

# Artificial Intelligence—Robotics for Prognostics and Health Management (PHM)

## Message from the Guest Editors

This Special Issue aims to collect a variety of studies on robotics (and robotics) enhanced by AI in the field of PHM. Novel approaches in robotic inspection systems, robot perception for fault diagnosis, path planning and tracking for patrol inspection, and self-learning with AI for autonomous inspection schemes are welcome, as well as the smart design of inspection robots using AI-generative models. Theoretical contributions, model development, and performance improvements through technology fusion in the aforementioned fields are invited. Topics of interest include (but are not limited to):

- Extreme robotics for PHM;
- Deep learning in grasping and manipulation for inspection robotics;
- Patrol and precise inspection with mobile robotics;
- Object detection, segmentation, and categorization;
- Path planning and tracking with reinforcement learning:
- Physical human-robot interaction;
- Generative design of inspection robots with AI;
- Al based object detection for fault diagnostics and autonomous inspection;
- Model-based control with deep neural network;
- Autonomous flight/driving with self-learning;
- Collision avoidance with novel sensors and Al.

### **Guest Editors**

Dr. Ki-yong Oh

Dr. Woochul Nam

Dr. TaeWon Seo

## Deadline for manuscript submissions

closed (20 September 2024)



# **Sensors**

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/112090

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)

