applied sciences

an Open Access Journal by MDPI

IMPACT FACTOR 2.7

CITESCORE 4.5

Robotics and AI Inspection under High-Risk Environments

Guest Editors:

Prof. Dr. Baojun Shi
School of Mechanical Engineering, Hebei University of Technology, Tianjin, China

Dr. Ting Wang
1. State Key Laboratory of Robotics, Shenyang Institute of Automation, Chinese Academy of Sciences, Shenyang 110016, China
2. Institutes for Robotics and Intelligent Manufacturing, Chinese Academy of Sciences, Shenyang 110169, China

Deadline for manuscript submissions:
closed (31 October 2023)

Message from the Guest Editors

Dear Colleagues,

Robotics technology has been applied in many fields. In high-risk environments, it is of especially great significance to perform inspection tasks using robotics instead of people. With the rapid development of AI technology, such as deep learning, robotics inspection has become more intelligent. Therefore, this Special Issue is intended to present new ideas and experimental results in the field of robotics and AI inspection technology in high-risk environments.

Areas relevant to robotics and AI inspection include, but are not limited to, robotics environment perception, safety hazard/disaster detection, instrument identification and reading, hazardous chemical leakage detection and location, emergency handling, mapping and navigation. This Special Issue will publish high-quality, original research papers, in the following overlapping fields:

- Artificial intelligence, machine learning and deep learning;
- Intelligent analysis, reasoning, decision-making;
- Emergency handling;
- Computer vision;
- Video and image analysis;
- Environmental perception and information fusion;
- Mapping and navigation;
- Neural network;
- Big data processing algorithms and applications.

applied sciences

IMPACT FACTOR 2.7

CITESCORE 4.5

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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), Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
𝕏@Applsci