

Special Issue

Virtual and Augmented Sensing Techniques via Embedded ML Models for IoT Measurement Infrastructures

Message from the Guest Editors

In recent years, we have witnessed the exponential growth of virtual and augmented sensing techniques, and of embedded machine learning (ML) as well. Virtual sensing encompasses all those methods using to estimate parameters that cannot be directly measured due to the unavailability of dedicated sensors. On the other hand, augmented sensing includes all those techniques in which the performance of standard sensors are enhanced, thus obtaining finer results. Both approaches are usually implemented by resorting to ML, and artificial intelligence (AI) in general. The application scenarios are countless, especially whenever Internet of Things (IoT) measurement infrastructures are exploited: from environmental monitoring to smart cities, distributed/ pervasive measurement infrastructures in critical environments, and industrial monitoring, etc. Potential topics include, but are not limited to, the following:

- Virtual sensing;
- Augmented sensing;
- Embedded ML;
- IoT measurement infrastructures;
- Distributed and pervasive measurement systems;
- Wireless sensor networks;
- Environmental monitoring in a broad sense with virtual and augmented sensing.

Guest Editors

Dr. Giacomo Peruzzi

Dr. Alessandro Pozzebon

Prof. Dr. Matteo Bertocco

Deadline for manuscript submissions

25 November 2025



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/178795

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

[mdpi.com/journal/
sensors](https://mdpi.com/journal/sensors)





Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



[mdpi.com/journal/
sensors](https://mdpi.com/journal/sensors)



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)