



Radio Frequency Machine Learning (RFML) Applications

Guest Editors:

Dr. William Headley

Virginia Tech National Security
Institute, Spectrum Dominance
Division, Blacksburg, VA, USA

Prof. Dr. Alan Michaels

Virginia Tech Hume Center for
National Security and
Technology, Virginia Tech,
Blacksburg, VA 24061, USA

Deadline for manuscript
submissions:

closed (30 April 2023)

Message from the Guest Editors

In recent years, radio frequency machine learning (RFML) has seen a massive increase in interest due to the ever-increasing capabilities of state-of-the-art deep learning technologies, especially in other modalities such as image recognition, natural language processing, etc. This is especially true for spectrum sensing (signal detection, estimation, classification, and identification) and cognitive radio (intelligent digital signal processing, reconfigurable communications, etc.) applications. This Special Issue aims to highlight advances in the deployment and realization of these technologies in real systems. Topics include, but are not limited to:

- RFML solutions for realistic spectral environments/scenarios;
- RFML deployment considerations (e.g., SWaP considerations for IoT);
- RFML intuition improvements (increased interpretability, uncertainty/reliability metrics, etc.);
- RFML datasets for improving training/deployment outcomes (synthetic, captures, augmented, etc.);
- Optimized toolchains and processing approaches for RFML modalities.





sensors



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Department of Electrical and
Information Engineering,
Politecnico di Bari, Via Orabona
4, 70126 Bari, Italy

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.

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)

Contact Us

Sensors Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/sensors
sensors@mdpi.com
[X@Sensors_MDPI](#)