Special Issue

Radio Frequency Machine Learning (RFML) Applications

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.

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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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