

Special Issue on Emerging Trends in Machine Learning for Signal Processing

CALL FOR PAPERS

Recently, there is an increasing interest in developing “smart” devices and systems able to interact with their environment, for example, Internet of Things and Human-Machine Interfaces. The term “smart” is used to describe a set of advanced functionalities implemented utilizing sophisticated computational intelligence (CI) algorithms. Machine learning (ML) constitutes an important area of CI dealing with the ability of computers/machines to learn through knowledge representation, processing, and storing. ML offers solutions to difficult engineering problems, in a similar way to the humans’ brain processing. Moreover, considering the large amount and diversity of data (image, video, time series, 1-D signals, text, etc.) massively generated and stored by modern “smart” systems, the need for efficient ML algorithms in terms of accuracy and speed becomes increasingly important. In the light of this rapid development of machine learning tools, this special issue focuses on recent trends in applying ML methodologies for processing signals coming from any source. This special issue aims to publish high-quality research papers as well as review articles addressing emerging trends in machine learning signal processing. Original contributions, not currently under review to a journal or a conference, are solicited in relevant areas.

Potential topics include but are not limited to the following:

- ▶ Learning theory (supervised/unsupervised) for signal processing
- ▶ Machine learning from big data
- ▶ Deep learning for signal processing
- ▶ Brain-computer interfacing
- ▶ Cognitive systems for signal processing
- ▶ Evolutionary computation for signal processing
- ▶ Neural modeling and computation for signal processing
- ▶ Hybrid intelligent systems
- ▶ Intelligent agents
- ▶ Neural hardware systems for signal processing
- ▶ Learning, fusing classifiers
- ▶ Kernel methods and high performance algorithms/implementations
- ▶ Applications (audio/image/video/text processing in bioinformatics, communications, security, biomedicine, etc.)

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/cin/etm/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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