

Application of Signal Processing, Machine Learning and IOT in Sustainable Development of the Society

Abstract:

Day by day technologies like Signal Processing, Machine Learning and IOT are taking the center stage when it comes to its application towards sustainable development of society. Be it a small home appliance or a huge power system grid, these technologies are ensuring better utilization of resources, optimum handling of complex systems and a better lifestyle. This symposium focuses on advanced technologies related to signal processing and machine learning technologies for novel IoT (Internet of Things) applications. Successful examples include environmental monitoring, artificial intelligence, health care, indoor localization, wireless networks and multimedia interactions. One of the objectives of this symposium is to present IOT applications that employ state-of-the-art signal processing and machine learning technologies. The other main purpose is to promote interdisciplinary collaborations between researchers in the fields of signal processing and machine learning technologies for novel IoT applications.

Although this topic is very much relevant to the broad focus areas of the conference, it is not completely included in the main thrust areas. Therefore, we are proposing a symposium titled, “Application of Signal Processing, Machine Learning and IOT in Sustainable Development of the Society” under the First International Conference on Emerging Electronics & Automation (E2A). The main thrust areas for the symposium are as follows but not limited to this.

Signal Processing:

- Acoustic and Vibration Signal Processing
- Biomedical Signal Processing
- Communication Signal Processing
- Detection and Estimation
- Earth Resources Signal Processing
- Geophysical and Astrophysical Signal Processing
- Multi-dimensional Signal Processing
- Optical Signal Processing
- Remote Sensing
- Signal Filtering
- Signal Processing Technology

Machine Learning:

- Fuzzy Systems
- Neural Networks
- Machine learning

- Probabilistic Reasoning
- Evolutionary Computing
- Pattern Recognition
- Hybrid intelligent systems
- Software agents
- Morphic Computing
- Image processing
- E-commerce, E-medicine
- Rough Sets
- Symbolic machine learning
- Wavelet
- Signal or Image Processing
- Vision Recognition
- Biomedical Engineering
- Telecommunications
- Reactive Distributed AI
- Nano & Micro-systems
- Data Visualization

Internet of things (IoT)

- Internet of things (IoT) Applications in Smart Grid
- Wide Area Monitoring Systems (WAMS)
- Wide Area Control (WAC)
- Phasor Measurement Techniques
- Smart Power Grid
- Power System Cyber Security
- Power Grid Resilience
- Communication Technologies for Smart Grid
- Communication Protocols and Layers
- Parallel computing for Power System
- Actuators and Sensors for Smart Grid

Expected No of Papers: 20

Name and Designation of Proposers:

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