

# **Emerging Trends in Wireless Sensor Network in handling Multimedia Devices through Computational intelligence and Machine Learning approaches**

## **Guest Editors:**

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## **Introduction:**

In the contemporary world with the amelioration of diverse technologies in the field of wireless sensor network there is a remarkable change that is happening in both academia and industry. Wireless Sensor network in today's research mainly focus on deal with handling of ever growing mobile computational devices with enhanced energy efficient protocols. The entire physical world comprises of various networking components that are deployed in such a way that they can efficiently deal with inquisitive data that is being sensed, acquired, stored and processed by the smart applications that are principality of smart homes, industries, health care monitoring and robotic devices, environmental engineering components, Agricultural applications and defense related equipment.

This special issue would mainly focus on such advancements in the field of wireless sensor network in managing the multimedia devices that focus on the cutting edge research and innovation. It covers the various aspects and real-time issue of establishment and maintenance of wireless sensor network through incorporation of computational intelligent mechanisms and machine learning approaches. It scooches through various energy efficient mechanism, protocols, topologies and architectures. All the articles focus the decisive association among the wireless sensor technology and mobility, accompanied by opportunities and real-time challenges.

## **Topics of Interest:**

- Efficient multi-source multi-sensor fusion strategy
- Energy-efficient Protocols
- Energy-efficient sensing techniques.
- Experimental studies of Wire Sensor Networks
- Fod/edge computing for WSNs for context awareness.
- Lightweight multimedia encoding techniques
- Multi Agent Systems
- Network modelling and performance analysis

- Orchestration of wireless sensor network through computational Intelligent mechanisms
- Privacy Preserving in Wireless Sensor Network
- QoS based mechanism.
- Reliable and Real-time multimedia streaming
- Sensor fusion in distributed sensor networks and internet of things
- Smart data routing, processing and storage strategies.
- Energy-efficient Mobile ad-hoc networks
- Architecture and Prolonged life time of underwater wireless sensor network
- Distributed sensor networks implementation and challenges
- Machine Learning algorithms in wireless sensor networks
- IoT and the role of Wireless Sensor networks in IoT platform.
- Feasibility studies and future challenges in Wireless Sensor Network
- Wireless Sensor Networks in Interdisciplinary activities

**Keywords:** Wireless Sensor Network, Machine Learning, Computational Intelligence, Energy-efficient mechanisms and Protocols.

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