# **Special Issue**

# Efficient Resource Allocation in Wireless Sensor Networks

# Message from the Guest Editor

Wireless Sensor Networks (WSNs) are a network of spatially distributed autonomous sensor nodes that are used to monitor physical or environmental conditions, such as temperature, humidity, pressure, sound, or motion. These nodes communicate wirelessly to send the collected data to a central location for processing and analysis. WSNs play a crucial role in various applications, from environmental monitoring to industrial automation and healthcare. Efficient resource allocation in WSNs is crucial for optimizing the network's performance, extending its lifetime, and ensuring reliable data transmission. Wireless Sensor Networks consist of numerous spatially distributed sensor nodes that monitor and report environmental or physical conditions, such as temperature, sound, or humidity, to a central location. Efficient resource allocation in WSNs involves a holistic approach, balancing energy, bandwidth, computational power, and memory to enhance the network's overall performance and longevity. Advanced techniques and continuous innovation in this field are vital for supporting the growing demands and complexity of modern sensor networks.

# Guest Editor

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#### Editor-in-Chief

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