

## **Special Session2: Data Science for Internet of Things Innovative**

**Organizer:** Asst. Prof. Dr. Kreangsak Tamee

### **Session Co-Chairs:**

- Asst. Prof. Dr. Winai Wongthai
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### **Session Abstract and Areas:**

Data science is an interdisciplinary field that involves techniques to acquire, store, analyze, manage, and publish data. Data science considered as a critical component that maximizes the utilization of the data. For example, data can be analyzed using machine learning, data analysis and statistics, optimizing processes, and maximizing their power in larger scenarios.

In the Internet of Things (IoT), smartphones and household appliances can easily become nodes in a composed sensor network that measures environmental parameters and generates user interaction data. Since sensor networks are mainly data-oriented networks, i.e., sensed data is their most valuable asset and the reason for the operation of the whole network, data science techniques have been adopted to improve the IoT in terms of data throughput, self-optimization, and self-management. In fact, incorporating the lifecycle that proposed by the data scientists will impact the future of the IoT in many aspects. For instances, data science techniques can provide IoT researchers a scenarios reproduction, an acquisition optimization, and analysis and visualization of the data acquired by IoT devices.

Therefore, this special session will focus on research works which are directly or indirectly supporting the data science and Internet of Things (IoT).