HPCC'2021

Special Session: Smart Systems and Applications Empowered by Computing, Communication and Control Techniques

Smart systems incorporate functions of computation, communication, and control in order to describe and analyze a situation, and make smart decisions based on the available data in a predictive or adaptive manner. The "smartness" of the smart system can be attributed to autonomous operation based on intelligent computation, closed-loop control, and networking capabilities. Recently, emerging techniques, such as machine learning, edge/cloud computing, pervasive/ubiquitous computing, big data, and Internet of Things (IoT) technologies have considerably contributed to the development of the future smart systems and applications. The major challenges in current smart systems include (i) how to design smart systems with control approaches and physical components, and (ii) how to optimize the performance indices (e.g., efficiency, cost, security) of smart applications with computing techniques. This workshop provides a platform for researchers and scholars to discuss the ongoing progress of smart systems and applications empowered by computation, communication and control techniques.

Topics of interest for this workshop include, but are not limited to

- Smart Computation, Communication, Networking Techniques
- Big Data and Machine Learning for Smart Systems
- Smart Transportation Systems
- Smart Energy Systems
- Smart Factory Systems

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