### International Workshop on IoT-related Technologies for 5G and Beyond

In conjunction with the 19<sup>th</sup> IEEE International Conference on Scalable Computing and Communications (ScalCom 2019)

http://www.smart-world.org/2019/scalcom/
Leicester, UK, 19-23 August, 2019

### Scope:

The development of the Internet of Things (IoT) has emerged numerous types of applications such as e-health (e.g., body area networks, etc.), quality-of-service (QoS) demanding services (e.g., mobile online gaming, AR/VR, etc.), which requires size-constrained and battery-charged user equipment to execute computation-intensive or/and latency-sensitive tasks.

Although newly advanced Cloud/Fog/Mobile edge computing techniques are promising to realize future IoT applications, several research challenges, including network slicing, network design, coded caching, energy harvesting, network optimization, etc, need further investigation. Moreover, the heterogeneity of IoT-related applications leads to the challenge to design a realistic system to handle the diverse QoS required applications. This workshop aims to bring together academic and industrial researchers to discuss the major challenges, recent breakthroughs and potential applications related to IoT, 5G and beyond.

Topics of interest include but are not limited to the following:

- Big data and IoT-based communication systems/networks
- Coded and scalable caching for 5G and beyond
- Design and implementation of IoT related applications
- Cloud/Fog/Edge computing based sensor systems for remote/real-time monitoring
- Network security for IoT-related technologies for 5G and beyond
- Green and sustainable wireless networks for 5G and beyond
- Enhanced AR/VR based technologies for 5G and beyond
- Prototype, test-bed design and demonstrations for 5G and beyond
- Open issues, surveys on IoT-related technologies for 5G and beyond

### **Organisation:**

# **General Chair:**

- Qingsong Ai, Wuhan University of Technology, China
- Yunfei Chen, University of Warwick, UK

#### **Programme Chair:**

- Yangzhe Liao, Wuhan University of Technology, China
- Quan Yu, Wuhan University of Technology, China
- Edwin Ren, University of East Anglia, UK

## **Technical Program Committee:**

- Xiaojun Zhai, University of Essex, UK
- Yanghong Tan, Hunan University, China
- Qingguo Du, Wuhan University of Technology, China
- Yi Han, Wuhan University of Technology, China
- Xiangyu Yu, South China University of Technology, China
- Paul Comerford, Information Commissioner's Office, UK
- Liang Wang, Northumbria University, UK

#### **Important Dates:**

Paper Submission Deadline: 23 April, 2019 Authors Notification: 4 May, 2019 Camera-Ready Paper Due: 19 May 2019

Conference Date: 19-23 August 2019

#### **Submission Guidelines:**

Please submit your paper via EDAS system at <a href="https://edas.info/newPaper.php?c=25466">https://edas.info/newPaper.php?c=25466</a>. A submission is limited to 6 pages for a special session paper. Format is IEEE conference paper, double column, in Portable Document Format (.pdf). A submission can have at most 2 additional pages, with a page overlength charge, if the paper is accepted. Accepted conference papers will be published by IEEE CPS (IEEE-DL and EI indexed). At least one author of each accepted paper is required to register and present their work at the conference; otherwise the paper will not be included in the proceedings. Best Paper Awards will be presented to high quality papers. Selected papers will be recommended to special issues. More details can be found via <a href="http://www.smart-world.org/2019/scalcom/">http://www.smart-world.org/2019/scalcom/</a>.

Manuscript Templates for Conference Proceedings can be found at: https://www.ieee.org/conferences\_events/conferences/publishing/templates.html

**Workshop contact:** Please email enquiries to Dr. Yangzhe Liao (yangzhe.liao@whut.edu.cn) and Dr. Quan Yu (yuquan@whut.edu.cn).

This workshop is supported by the Key Laboratory of Broadband Wireless Communication and Sensor Networks of Hubei Province, China and the National Natural Science Foundation of China.