

# 2019 IEEE International Conference on Industrial Informatics (INDIN'19)

## Special Session on 5G for Vertical Industry Services

organized by

Principal Organizer: Dr. Yulei Wu (y.l.wu@exeter.ac.uk)  
Affiliation: University of Exeter, United Kingdom

Organizer 1: Professor Dimitra Simeonidou (Dimitra.Simeonidou@bristol.ac.uk)  
Affiliation: University of Bristol, United Kingdom

Organizer 2: Professor Osvaldo Simeone (osvaldo.simeone@kcl.ac.uk)  
Affiliation: King's College London, United Kingdom

Organizer 3: Professor Payam Barnaghi (p.barnaghi@surrey.ac.uk)  
Affiliation: University of Surrey, United Kingdom

## Call for Papers

The International Telecommunication Union (ITU) has identified three broad use cases: enhanced mobile broadband (eMBB), ultra-reliable and low-latency communication (uRLLC), and massive machine-type communications (mMTC). 5G networks are expected to allow the coexistence of these use cases over the same physical infrastructure. However, different vertical industry services have diversified requirements. For example, the applications like self-driving cars and remote surgery in uRLLC use case have stringent requirements on availability, latency and reliability. The applications like e-health and public safety in mMTC use case bring additional challenges on supporting a large number of Internet of Things (IoT) connections within a coverage area. In order to make 5G a big success and support the added value of 5G over previous generation networks by enabling various vertical services, many challenges still need to be investigated in terms of algorithms, architecture, and collaboration with other contributors over the end-to-end path.

This Special Session is devoted to the most recent developments and research outcomes addressing the related theoretical and practical aspects on 5G for supporting various vertical services. It also aims to provide worldwide researchers

and practitioners an ideal platform to innovate new solutions targeting at the corresponding key challenges.

Topics of particular interests include the following tracks, but are not limited to:

- Enhanced Mobile Broadband (eMBB)
- Ultra-Reliable and Low-Latency Communication (uRLLC)
- Massive Machine-Type Communications (mMTC)
- Vertical Applications and Services in Industry, Healthcare and Smart Environments
- Large-scale mMTC deployments
- Enabling Technologies for 5G Vertical Industries
- Architecture, Standards and Business Models for 5G Vertical Industries
- Security, trust and privacy for 5G Vertical Industries
- Simulations, Testbeds and Experimentations

**Submissions Procedure and Deadlines:** All the instructions for paper submission are included in the conference website <https://www.indin2019.org/>