

IEEE International Workshop on 5G in Internet of Things (5G-IoT)

To be held in conjunction with

The 43rd Annual IEEE Conference on Local Computer Networks (LCN 2018)
1-4 October 2018, Chicago, USA

The Internet of Things (IoT) is a network that allows everyone and everything to be connected anytime and anywhere. In the last decade, IoT has become one of the fastest areas of research and development among academia and industrial organizations due to a rapid increase in the number of connected devices. Various applications of IoT include Intelligent Transportation Systems (ITSs), smart cities, smart homes, smart factories, smart grid, precision agriculture, healthcare, to name just a few. In this context, wireless cellular technologies play an important role as a significant part of the IoT, since a main part of the IoT communications is designed over cellular technologies. By 2020, approximately 50 billion connected devices and more than 200 billion connected sensors are expected to be supported by the next generation of mobile networks (5G). The improvements introduced by 5G are expected to affect mobile broadband and smartphone experience, and also to become essential for supporting the expected increase in the IoT connected devices. 5G is also expected to seamlessly operate with technologies such as Wi-Fi. Therefore, research efforts are needed to efficiently and effectively enable IoT over 5G. This workshop is expected to cover state-of-the-art research in different aspects of IoT and 5G systems. It will be a venue for researchers to present their papers on the recent development in theory, application, and implementation of 5G technologies in IoT scenarios.

Organizing Committee

General chair: Enver Ever
Middle East Technical Uni. Northern Cyprus Campus

Workshop Co-chairs: Hadi Zahmatkesh
Middle East Technical Uni. Northern Cyprus Campus

Sadia Din
Kyungpook National University, Korea

Krishna C Doddapaneni
Altiux Innovations, USA

Technical Program Committee:

Adnan Yazici, Nazarbayev University, Kazakhstan
Alfredo Navara, Università degli Studi di Perugia, Italy
Altan Kocyigit, Middle East Technical University, Turkey
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Krishna Doddapaneni, Altiux Innovations, USA
Leonardo Mostarda, Camerino University, Italy
Purav Shah, Middlesex University, United Kingdom
Rosario Culmone, Camerino University, Italy
Sain Saginbekov, Nazarbayev University, Kazakhstan
Sateesh Kumar Peddoju, IIT Roorkee, India
Tuan Le, Middlesex University, United Kingdom
Yoney Kirsal Ever, Near East University, Cyprus

Important dates:

Paper submission: **May 14, 2018**
Paper submission (Extended): **June 25, 2018**
Notification of acceptance: **July 16, 2018**
Final camera-ready paper: **August 6, 2018**

Topics of interest include but are not limited to:

- 5G enabling technologies for the IoT
- Architectures, standards and protocols for the IoT
- Case studies and real world deployment IoT scenarios in 5G networks
- Modelling and performance evaluation studies for IoT and cellular interactions
- Security and privacy issues for the IoT in 5G networks
- Device-to-Device (D2D) communications in IoT scenarios
- Mobility support in 5G networks
- Software Defined Networking (SDN) in 5G for supporting the IoT
- Interaction of 5G with green IoT
- Energy-efficient 5G for green IoT
- Cloud computing for the IoT in 5G
- Fog computing in support of the IoT in 5G
- Big data analytics in 5G networks for the IoT
- D2D communications as enabler for vehicular networks
- Business directions, status, and challenges

Submission Guidelines

Authors are required to submit full papers for presentation at the conference. Submitted papers must not be previously published or under review by another workshop, conference, or journal.

Submitted manuscript must be written in English (no more than 8 camera-ready pages, 10 pt font in IEEE format including figures, tables, and references) and should present novel perspectives and match with the topics of interest of the workshop. However, short papers up to 4 pages describing work in progress will also be considered. Papers in excess of page limits shall not be considered for review or publication. Please note that papers must be submitted electronically to the EDAS system in PDF format only.

All accepted and presented papers will be published in the proceeding of IEEE LCN 2018 and indexed by IEEEExplore.

Website: <http://5g-iot.ncc.metu.edu.tr/>