

# Annual Conference of the IEEE Industrial Electronics Society (IECON 2021)

## Special Session on “Internet of Things Technology for Industrial Smart City Applications”

### Organized by

**Principal Organizer:** Dr. Umair Mujtaba QURESHI ([umqureshi2-c@my.cityu.edu.hk](mailto:umqureshi2-c@my.cityu.edu.hk))  
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## Call for Papers

### Theme:

This special session focuses on the use of Internet of Things (IoT) technology within smart cities for non-consumer applications. IoT has transformed how to collect, communicate, store and process data. IoT deployment in smart cities is on-going, and is taking advantage of new networking technologies and data processing approaches. In smart cities there are systems that need to ensure network performance, such as reliable connectivity and latency, appropriate intelligent information processing, in addition to device management within the context of industrial settings. We solicit technical papers describing original ideas, theory, methodology and experiences from the design, implementation and deployment of such systems based on any subset of IoT technology. This session is sponsored by the IEEE IES TC on Cloud and Wireless Systems for Industrial Applications.

Topics of interest include, but are not limited to:

- 1) IoT for smart homes, e-health and assisted living
- 2) IoT for intelligent transport, connected car and automotive,
- 3) IoT for utility monitoring, water management and waste management,
- 4) IoT for energy management, environmental management, green buildings, and infrastructures,
- 5) IoT for smart public places, entertainment and retail
- 6) Smart manufacturing, logistics and equipment maintenance

- 7) Security and safety issues in industrial IoT applications (context awareness, localization in smart workspaces, device management, etc.)
- 8) New technology and approaches to city-wide networks (NB-IoT, LoRa, SDN, NFV, etc).
- 9) Big data analytics, cloud computing and machine learning as applied to applications of interest.
- 10) Opportunities and risks in implementing intelligent IoT sensing applications in smart city.

**Submissions Procedure:** All the instructions for paper submission are included in the conference website: <https://attend.ieee.org/iecon-2021/>

**Deadlines:**

Full paper submission:	June 25, 2021
Paper acceptance notification:	July 30, 2021
Camera-ready paper submission:	Aug. 27, 2021

About the organizers:

**Dr. Umair Mujtaba QURESHI** received Ph.D. degree in Computer Science from City University of Hong Kong in 2019, M.Eng. degree in Communication Systems and Networks and B.Eng. degree in Telecommunication Engineering from the Mehran University of Engineering and Technology, Pakistan, in 2014 and 2011, respectively. He is currently working as a Postdoc researcher at City University of Hong Kong. He has experience in working on many Industrial-Academic projects. He also has experience working in TCL Research Corporation as a Senior Engineer. His research interests include the Internet of Things (IoT), cyber physical systems, and physical layer security. He has many publications in the above-mentioned fields. He is a member of the IEEE Industrial Electronics Society.

**Dr. Zunera UMAIR** is working as an Assistant Professor at Department of Applied Data Science at Hong Kong Shue Yan University. She also has postdoc experience at City University of Hong Kong. She completed her doctorate studies specializing in Computer Science from City University of Hong Kong in 2020. She did her Master of Engineering in Communication Systems and Networks and Bachelor of Engineering in Telecommunications from Mehran University of Engineering and Technology in Pakistan. Her research interests include areas of Data science and analytics, IoT and Sensor networks, Distributed networks, Software-defined Networking and Wireless Networks.

**Dr. Gerhard Petrus HANCKE:** (Senior Member, IEEE) received the B.Eng. and M.Eng. degrees from the University of Pretoria, South Africa, in 2002 and 2003, respectively, and the Ph.D. degree in computer science from the Computer Laboratory, Security Group, University of Cambridge, in 2009. He is currently an Associate Professor with the City University of Hong Kong, Hong Kong. His research interests include system security, embedded platforms, and distributed sensing applications related to the industrial Internet of Things.

**Prof. Mikael GIDLUND:** (Senior Member, IEEE) received his Eng. degree in radio communication systems from the Royal Institute of Technology, Stockholm, Sweden, in 2004, and the Ph.D. degree in electrical engineering from Mid Sweden University, Sundsvall, Sweden, in 2005. From 2006 to 2007, he was a Research Engineer and a Project Manager with Acreo AB, Kista, Sweden. From 2007 to 2008, he was a Project Manager and a Senior Specialist with Nera Networks AS, Bergen, Norway. From 2008 to 2015, he was a Senior Principal Scientist and a Global Research Area Coordinator of wireless technologies with ABB Corporate Research, Västerås, Sweden. Since 2015, he has been a Professor of computer engineering with Mid Sweden University. He holds over 20 patents (granted and pending applications) in the area of wireless communication.

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