



Cybertwin-driven 6G for Internet of Everything (IoE): Architectures, Challenges and Industrial Applications

Theme: The Mobile traffic data and resources in IoE in wireless networking has raised numerous problems in terms of Performance Monitoring in Edge connected devices. Next-generation networkings, such as 6G and Cybertwin, are implemented to address these problems. Sixth-generation (6G) communication would play a vital role in supporting complex wireless interconnectivity. In order to allow millions of connected devices and applications to operate smoothly at high data rates and low latency, a network of the 6G is anticipated. The only access point for the internet is Cybertwin, which serves as a contact hub and tracks all user requirements. In the edge-cloud cyberspace, Cybertwin is a digital database of smartphone activities, terminals, objects, etc. The integrated use of technology like Blockchain, 6G and Cybertwin is a multidisciplinary area for designing effective and efficient IoE systems. The purpose of this special issue is to examine the new technology, innovative architectures and future problems in depth in terms of Network Secured Infrastructure based on Cybertwin for 6G-enabled IoE.

This special section will focus on (but not limited to) the following topics:

- Theories of Cybertwin-driven 6G
- Secure Framework design for Blockchain and Cybertwin-driven 6G
- Security of Cybertwin and Blockchain schemes for IoE
- 6G Network Slicing using Blockchain and Cybertwin-driven Mechanism for IoE
- Energy monitoring for radio access network (RAN) framework in Blockchain and Cybertwin-assisted 6G for IoE
- Multi-access edge/fog computing in Blockchain and Cybertwin-assisted 6G
- New Resource allocation Techniques in Cybertwin-driven 6G
- Cybertwin and Blockchain for Industry 4.0/5.0
- IoE Applications with Cybertwin Techniques

Follow the guidelines in "Information for Authors" in the IEEE Transaction on Industrial Informatics <http://www.ieee-ies.org/pubs/transactions-on-industrial-informatics> . Please submit your manuscript in electronic form through Manuscript Central web site: <https://mc.manuscriptcentral.com/tii> . On the submitting page #1 in popup menu of manuscript type, select: SS on **Cybertwin-driven 6G for Internet of Everything (IoE): Architectures, Challenges and Industrial Applications**

Submissions to this Special Section must represent original material that has been neither submitted to, nor published in, any other journal. Regular manuscript length is 8 pages.

Note: The recommended papers for the section are subject to final approval by the Editor-in-Chief. Some papers may be published outside the special section, at the EIC discretion.

Timetable: **Deadline for manuscript submissions** **July 30, 2021**
 Expected publication date (tentative) March 2022

Guest Editors:

Dr. Gaurav Dhiman, Bikram College of Commerce, India gaurav.dhiman@thapar.edu
 Prof. Atulya Nagar, Liverpool Hope University, UK nagara@hope.ac.uk
 Dr. Seungmin Rho, Sejong University, Korea smrho@sejong.ac.kr ; smrho@sejong.edu;
 Dr. S. Vimal, Ramco Institute of Technology, India svimalphd@gmail.com

Editor-in-Chief: Prof. Dr.-Ing. Ren C. Luo

tii@ira.ee.ntu.edu.tw

<http://www.ieee-ies.org/pubs/transactions-on-industrial-informatics>