IEEE Transactions on Industrial Informatics
CALL FOR PAPERS
for Special Section on

Next Generation Blockchain Technology with Industrial IoT in Industry 4.0

Theme:

The fourth industrial revolution named Industry 4.0 has incorporated numerous emerging technologies including, the Internet of Things (IoT), Cyber-Physical Systems (CPS), cloud computing, and Artificial Intelligence (AI) for developing smart, open and secured factories. With the advancements in the Internet and related technologies, numerous Industry 4.0 applications have emerged across the globe that employs actuators and sensors to sense, manipulate and communicate the data for industrial automation. Consequently, the Blockchain technology can eliminate the need for a centralized authority and handle various associated security issues in industry 4.0. Thus, this special issue aims to explore the theories around Blockchain, the various working models associated with the Industrial Internet of Things (IIoT) and the challenges of Industry 4.0 application in practice. Furthermore, due to the inherent high-volume and high-velocity data generated by IoT, this special issue is also intended to embrace the security and privacy angle of Blockchain in the context of IIoT. Furthermore, Blockchain creates extraordinary opportunities for businesses to come together on financial platforms and trade in digital cryptocurrencies. Thus, this special will explore various Blockchain-based concepts and their applications from both IIoT in Industry 4.0. Further, this special section theme is expected to provide a wide spectrum of next-generation Blockchain technology for various Industry 4.0 applications such as IoT, healthcare, cybersecurity, data analytics, software-defined networks, cyber-physical systems, drones, and other competitive technologies.

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

- Blockchain-based security solutions mechanisms for Industry 4.0
- Blockchain schemes for decentralization in IIoT and Industry 4.0
- Blockchain-based security tools and procedures for industrial IoT and industry 4.0
- Blockchain in CPS, social networking, crowd-sensing, 5G, edge and cloud computing
- Block chain in digital forensic and threat hunting
- Blockchain for healthcare 4.0
- Blockchain for privacy in the Web
- Blockchain for Data Analytics
- Blockchain solutions for software defined networks.
- Competitive technologies of Blockchain in IIoT and Industry 4.0
- Blockchain: Limitations and Future Possibilities
- Futuristic Applications and Challenges
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Manuscript Preparation and Submission

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 **Next Generation Blockchain Technology with Industrial IoT in Industry 4.0**

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**   **December 31, 2021**
Expected publication date (tentative)   **June 2022**

Guest Editors:

Dr. Hong-Ning Dai, Macau University of Science and Technology, Macau.   hndai@ieee.org
Dr. Hoang Pham, Rutgers University, United States   hopham@soe.rutgers.edu
Dr. Arun Kumar Sangaiah, Vellore Institute of Technology, India   aksangaiah@ieee.org
Dr. Rodrigo Capobianco Guido, São Paulo State University, Brazil.   guido@ieee.org

Editor-in-Chief: Prof. Dr.-Ing; Ren C. Luo   tii@ira.ee.ntu.edu.tw
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