

IEEE IoT Journal Special Issue on:

Knowledge and Service Oriented Industrial Internet of Things: Architectures, Challenges and Methodologies

One-Page Call-For-Papers:

The ever-increasing evolution of technologies in communication, artificial intelligent (AI), manufacturing and etc. are promoting a new wave of industrial revolution. Industrial Internet of Things (IIoT) has been considered as a critical stimulator for both science and economic by amounts of countries. Compared with the traditional consumer IoT with purpose of improving human's awareness of environment, IIoT is typically knowledge and service oriented. On the one hand, the data in IIoT is with high volume and diverse properties, which provides a great potential to IIoT for acquiring different types of valuable knowledge. On the other hand, IIoT needs to fulfill various types of services with heterogeneous requirement on scalability, latency, throughput, reliability, robustness, privacy and security. Additionally, those services may differ with each other in data frame, communication carrier and etc. As a result, service requirement guarantees are more complex in IIoT than that in consumer IoT. The aim of this special issue is to foster novel and multidisciplinary approach to realize efficient knowledge and service oriented IIoT.

Topics include, but are not limited to the following

- Cloud-edge-device collaboration architecture of knowledge and service oriented IIoT
- Identity resolution schemes for IIoT
- Data sensing and merging techniques for IIoT
- Trustworthy model design for human-machine-object for IIoT
- Privacy-aware data sharing schemes for IIoT
- Stochastic or deterministic service guarantee framework for IIoT
- Cross layer optimization and resource allocation schemes for IIoT
- Deterministic multi-access edge computing for IIoT
- Distributed AI-based big data analysis for IIoT
- Knowledge caching and recommendation for IIoT
- Platforms or testbeds for realistic knowledge and service oriented IIoT applications

Important Dates:

Submission Deadline: October 1, 2021	Sec. Reviews Due/Notification: January 30, 2022
First Review Due: November 15, 2021	Final Manuscript Due: February 15, 2022
Revision Due: December 30, 2021	Publication Date: 2022

Submission Guidelines: The original manuscripts to be submitted by the authors need to follow the format and allowable number of pages described at: <http://ieeetj.org/guidelines-for-authors/>. The manuscripts submitted here should not be concurrently submitted for publication in other venues. The expanded versions of conference papers must contain significant amount of new and substantive material. Authors are requested to electronically submit their manuscripts through the IEEE Manuscript Central at: <https://mc.manuscriptcentral.com/iot>.

Guest Editors:

- Dapeng Wu, Professor, School of Communication and Information Engineering, Chongqing University of Posts and Telecommunications, China. (wudapengphd@gmail.com)
- Shaoren Wu, Full Professor, School of Information Technology, Illinois State University, USA. (E-mail: swu1235@ilstu.edu)
- Danda B. Rawat, Full Professor, Department of Electrical Engineering Computer Science, Howard University, USA. (E-mail: db.rawat@ieee.org)
- Paulo R. L. Gondim, Professor, Faculty of Technology, University of Brasilia, Brazil. (E-mail: prgond@gmail.com)
- Periklis Chatzimisios, Professor, International Hellenic University, Greece. (E-mail: pchatzimisios@ihu.gr)
- Jinbo Xiong, Professor, College of Mathematics and Informatics, Fujian Normal University, China. (E-mail: jbxiong@fjnu.edu.cn)