IEEE Internet of Things Journal
Special Issue on 6G-Enabled Internet of Things

6G wireless communications and networks will continue to move to higher frequency and wider bandwidth, with much higher data rate and spectral efficiency. Given the heterogeneity and densification of Internet of Things (IoT), 6G wireless network may need to be extended to modern Random Access for IoT applications, which can be achieved via smart protocol design and advanced signal processing and communications technologies. The modern random access techniques such as Massive MIMO, OFDMA, NOMA, sparse signal processing, or new orthogonal design techniques provide good candidacy for 6G-enabled IoT. In 6G, grant-free transmission should be designed for distributed IoT applications. IoT applications are often involved in self-organizing decision-making. 6G-enabled IoT will take advantage of the recent development of Artificial Intelligence (AI) techniques. It will generate new knowledge and understanding, and accelerate discovery and innovation in IoT. Each of these efforts is designed to amplify the intrinsically multidisciplinary nature of the emerging field of IoT. The 6G-enabled IoT will establish theoretical, technical, and ethical frameworks that will be applied to tackle many challenges in IoT, advancing technology for humanity. Topics of interests include, but are not limited to:

- Random access for 6G-enabled IoT;
- Information theory foundation of 6G-enabled IoT;
- Grant-free transmission in 6G-enabled IoT;
- Signal processing techniques for 6G-enabled IoT;
- Real-time sensing, learning, and decision making for 6G-enabled IoT;
- Network influence in 6G-enabled IoT;
- Resource management in 6G-enabled IoT;
- Self-organizing 6G-enabled IoT;
- AI and Machine learning for 6G-enabled IoT

Important Dates

Submission Deadline: August 1, 2020
First Review Due: October 15, 2020
Revision Due: November 30, 2020

Sec. Reviews Due: December 30, 2020
Final Manuscript Due: January 15, 2021
Publication Date: 2021

Submission Guidelines

Authors need to follow the manuscript format and an allowable number of pages described at http://ieeeiotj.org/guidelines-for-authors/. To submit a manuscript for consideration for the special issue, please visit the journal submission website at https://mc.manuscriptcentral.com/iot.

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