

IEEE Internet of Things Journal Special Issue on “Enabling a Smart City: Internet of Things Meets AI”

Future cities are to be not only an intelligent and green living environment but also providing human-centered public services at a lower cost. The Internet of things (IoT) and artificial intelligence (AI) are two cornerstone technologies enabling smart cities, and have been interacting with each other into an organic ecosystem. Some particular joint points where IoT meets AI are *intelligent IoT devices*, *smart sensing boosted by AI*, and *IoT big data mining with AI*. The trend of “IoT meetings AI” has already cast significant impact on the aspects characterizing a smart city. Smartphones are able to learn the touching pattern of users; home Wi-Fi router can intelligently detect and locate an intruder; vehicles network and communicate with each other for traffic control; video cameras installed in the street can perform face recognition locally. At the same time, the bright future of smart city has also motivated many scientific and engineering challenges for both academia and industry, in order to fully exploit the capabilities and benefits brought by the IoT and AI. Some important areas are smart city IT infrastructure planning; framework, protocol, algorithm for smart sensing and data mining; novel intelligent hardware platform or software framework; smart city modeling; security and energy efficiency. This special issue is to let researchers present their recent work showing how the IoT and AI can work together to enable a real smart city. Topics of interests include (but are not limited to) the following categories:

- IT infrastructure design for smart city
- IoT device search in smart city
- Representation of sensing knowledge from massive IoT devices
- Machine Learning techniques for big data
- Event alert and prediction in smart city
- Smart city applications such as healthcare, transportation and public security
- Intelligent IoT sensing
- Crowdsensing
- Novel IoT devices
- Trustable and secure smart city technologies
- Smart city architecture and modeling
- Super large-scale multi-agent system
- Human, IoT and AI Communication Protocols
- Privacy protection in IoT applications

Important Dates

Submissions Deadline: **September 15, 2018**; First Reviews Due: December 1, 2018

Revision Due: January 1, 2019; Second Reviews Due/Notification: February 1, 2019

Final Manuscript Due: **March 1, 2019**; Publication Date: 2019

Submission

All original manuscripts or revisions to the IEEE IoT Journal must be submitted electronically through IEEE Manuscript Central, <http://mc.manuscriptcentral.com/iot>. Solicited original submissions must not be currently under consideration for publication in other venues. Author guidelines and submission information can be found at <http://iot.ieee.org/journal>.

Guest Editors

Prof. Xiaohua Tian
Shanghai Jiao Tong University
xtian@sjtu.edu.cn

Prof. Yu Cheng
Illinois Institute of Technology
cheng@iit.edu

Dr. Devu Manikantan Shila
United Technologies Research Center
manikad@utrc.utc.com

Prof. Adam Wolisz
Technische Universität Berlin
adam.wolisz@tu-berlin.de