

**Call-For-Papers**  
**IEEE Internet of Things Journal Special Issue on**  
**Internet of UAVs over Cellular Networks**

The emerging unmanned aerial vehicles (UAVs) have been widely exploited for sensing purposes due to the larger service coverage compared with the conventional fixed sensor nodes. However, due to the limited computation capability of UAVs, real-time sensory data needs to be transmitted to the BS/server for real-time data processing. In this regard, the cellular networks are necessary to support the data transmission for UAVs, which is called as the [Internet of UAVs](#). Very recently, 3GPP has approved a study item on enhanced support to seamlessly integrate UAVs into future cellular networks. Unlike terrestrial cellular networks, UAV communications have many distinctive features such as high dynamic network topologies and weakly connected communication links. Besides, they also suffer from some practical constraints such as battery power, no-fly zone, sensing requirements, etc. Therefore, it is essential to develop novel communication and signal processing techniques in support of the ultra-reliable and real-time sensing applications.

Topics of interest relating to the Internet of UAVs include but are not limited to:

- Network architecture and protocols
- Channel measurement and modeling
- Transmission technologies, e.g., mmWave, Massive MIMO, etc.
- Interference cancellation and coordination
- Cooperation and relay techniques
- Radio resource management
- QoS-aware trajectory optimization
- AI-enabled Internet of UAVs communications
- Wireless power transfer aided Internet of UAVs
- Mobile edge computing
- Safety and security issues
- Prototype results, testbeds, and new applications

**Important Dates:**

Submission deadline: March 15, 2020

First review Due: June 1, 2020

Revision Due: July 15, 2020

Acceptance Notification: August 15, 2020

Final Manuscript Due: September 1, 2020

Publication Date: 2020

**Submission Guidelines:**

All original manuscripts or revisions to the IEEE IoT Journal must be submitted electronically through IEEE Manuscript Central at <https://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://ieee-iotj.org/guidelines-for-authors/>.

**Guest Editors:**

- Merouane Debbah (CentraleSupélec, Huawei France R&D, Paris, France), Email: [merouane.debbah@centralesupelec.fr](mailto:merouane.debbah@centralesupelec.fr)
- Hongliang Zhang (University of Houston, USA), Email: [h Zhang77@central.uh.edu](mailto:h Zhang77@central.uh.edu)
- Walid Saad (Virginia Tech, USA), Email: [walids@vt.edu](mailto:walids@vt.edu)
- Lingyang Song (Peking University, China), Email: [lingyang.song@pku.edu.cn](mailto:lingyang.song@pku.edu.cn)