



**IEEE 7th World Forum on Internet of Things**  
**20-24 June 2021 // New Orleans, Louisiana, USA**  
 Theme: The Impact of Artificial Intelligence on IoT

**Workshop on Unmanned Aerial Vehicles-Assisted Communications for the Internet of Things (UAV4IoT)**  
**(in conjunction with WF-IoT 2021)**

<b>Organizing Committee</b>
<b>Chairs:</b> <ul style="list-style-type: none"> <li>Fabrizio Granelli, University of Trento, Italy (<a href="mailto:fabrizio.granelli@unitn.it">fabrizio.granelli@unitn.it</a>)</li> <li>Kamesh Namuduri, University of North Texas, TX, USA (<a href="mailto:Kamesh.Namuduri@unt.edu">Kamesh.Namuduri@unt.edu</a>)</li> <li>Sofie Pollin, KU Leuven, Belgium (<a href="mailto:sofie.pollin@esat.kuleuven.be">sofie.pollin@esat.kuleuven.be</a>)</li> <li>Sahil Garg, Université du Québec, Montreal, Canada (<a href="mailto:sahil.garg@ieee.org">sahil.garg@ieee.org</a>)</li> </ul>
<b>Paper Submission Guidelines</b>
<p>All final submissions should be written in English with a maximum paper length of six (6) printed pages see web conference for instructions. Papers must be submitted through <a href="https://epapers.org/wf-iot2021/ESR/login.php">https://epapers.org/wf-iot2021/ESR/login.php</a>. See conference web page for instructions: <a href="https://wfiot2021.iot.ieee.org/authors-proposers/">https://wfiot2021.iot.ieee.org/authors-proposers/</a></p>
<b>Important Dates</b>
Paper submission deadline: Feb 21, 2021 Paper acceptance notification: March 21, 2021 Camera-ready submission: April 21, 2021

<b>Call for Papers</b>
<p>Mobile communication technology is leading towards the deployment of Fifth generation (5G) networks and beyond, wherein Internet of Things (IoT) will play a central role. It is expected that 5G deployments will be characterized by increased network density, enhanced capacity, near ubiquitous connectivity, and ultra-reliable and low latency communications, in order to deliver flawless quality of service (QoS) that is essential for IoT to be successful. While the Core Network development is progressing towards unprecedented flexibility and adaptability through the introduction of the 5G Service Based Architecture, Software Defined Networking (SDN) and Network Function Virtualization (NFV) principles to support network slicing, progress in other areas especially the edge and access section of mobile networks is limited by fixed monolithic and power-hungry Base Stations.</p> <p>In this scenario, the introduction of Unmanned Aerial Vehicle (UAV) supported aerial base stations represents an unprecedented chance to achieve physical tri-dimensional freedom in developing agile access strategies and fast network deployments. UAV technology is still in development stages and brings additional limitations in terms of available power and payload weight.</p> <p>The workshop aims to bring together researchers and practitioners to share their ideas, latest findings, and state-of-the-art results on fostering the promising benefits of UAV-based communications in 5G wireless networks and beyond.</p> <p>Potential topics include, but not limited to the following:</p> <ul style="list-style-type: none"> <li>- Novel architecture/communication protocols for UAV-based IoT communications and networking</li> <li>- Channel model for drone-to-sensors and drone-to-drone communications</li> <li>- Simple, scalable and cost-effective solutions for UAV communications in IoT scenarios</li> <li>- Access schemes for IoT sensors integration in 5G networks and beyond</li> <li>- Resource management for IoT in UAV-assisted communications</li> <li>- SDN and NFV based UAV/sensors architectures</li> <li>- IoT data and processing offloading schemes</li> <li>- UAV-supported mobile edge computing</li> <li>- Cutting-edge solutions for UAV-assisted IoT heterogeneous networks</li> <li>- Standardization efforts and testbeds for drone communication systems</li> <li>- Security in UAV-assisted IoT</li> <li>- Energy-aware IoT and UAV deployment and operation mechanisms</li> <li>- Renewable power management in IoT and UAV communications</li> <li>- UAV-assisted IoT applications in Smart Cities, Emergency Network Deployments, Remote Monitoring</li> <li>- Use cases, testing and field trials for drone assisted IoT</li> <li>- Other applications/implementations for UAV-assisted IoT scenarios</li> </ul>