Wi-DroIT 2019 – 1st International Workshop on Wireless Drones over Internet of Things
Santorini Island, Greece
May 29 - 31, 2019

Link: https://widroit2019.loria.fr

in conjunction with the:
*15th International Conference on Distributed Computing in Sensor Systems (**DCOSS 2019**)*

Workshop papers will get 8 pages in the IEEE proceedings, in the same volume with the DCOSS papers. Few selected papers will be invited to the special issue "**UAV-Based Applications in the Internet of Things (IoT)**" of *Sensors – Open Access Journal* (Impact factor: 2.475)

Important Dates
Abstract Submission: 1st March
Paper Submission: 8th March
Acceptance Notification: 1st April
Camera Ready: 15th April
Early Registration: 10th April

Scope
For this workshop, we search for papers that combine design of algorithms, optimization, and test-bed to develop the theoretical foundations for the drone systems operating in symbiosis with WSN in IoT applications. The numerous emergent applications nurtured by IoT may require an interdisciplinary approach, involving techniques from algorithm foundations as well as different areas, like robotics, artificial intelligence, mathematical modeling. Applications in complex domains lead to situations where multiple optimization objectives should be accounted in the proposed solutions. Decentralized and distributed, robust and secure algorithms are searched for drones systems that operate in rapidly-changing, uncertain, and potentially adversarial environments.

Topics (Not limited to)
Autonomous WSN via Drones
Topology monitoring of WSN with Drones
Build Remote Sensing Networks in emergency context via Drones
Communication architectures and protocols of Drones over IoT
Modeling and analysis of Drone systems over IoT
Theoretical foundations for communication routing beyond line-of-sight of Drones
Communication and networking aspects of cyber-physical systems
Theoretical foundations for parcel delivery using Drones
Drones/UAVS for monitoring network properties (coverage, connectivity) in emergency
Drones for detecting or discovering events
Facility location problem and Resource Management for Drone systems
4G-5G networks and UAVs
UAV assisted networks
Drones for environment (crop/forest) monitoring
Constraints and multi-objective optimization problems in UAVs

Localization, navigation, and dynamic path planning of UAVs over IoT
Ground Localization with Drones
Cooperative control of multiple UAVs
UAV secure communication techniques
Optimal UAV deployment strategies
High-accuracy navigation techniques
Real-time surveillance techniques
Performance, scalability, energy, and reliability in Drones' systems
Anomaly detection, network monitoring and forecasting
Trust, security, and privacy
Experimental results, simulators and test beds for drone networks
Cooperative Rendezvous for secure drone to drone communications
Secure communication between the drone and the ground networks

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Submission instructions
Authors are invited to submit original unpublished manuscripts reporting applied or technical research. Accepted and presented papers will be published in the same volume with the DCOSS 2019 conference proceedings. All papers will be reviewed by Technical Program Committee members and selected papers will be organized for presentation at the workshop.

All submissions will be exclusively electronic with a maximum length of eight (8) printed pages including title, authors, abstract, figures, diagrams, references and attachments. Articles must be prepared in English following the IEEE two-column Manuscript Templates for Conference Proceedings (available here) and submitted in PDF format only.
Submission link: https://easychair.org/conferences/?conf=widroit2019

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