The First Workshop on Digital Solutions for Natural Event Management

October 12-27 2023
Aveiro Congress Center, Portugal

In conjunction with IEEE WF-IoT 2023

IEEE World Forum
on Internet of Things

Leveraging IoT and Drones for Biodiversity Conservation and Disaster Management

Organizing Chairs:

Yunjia Wang
China University of Mining and Technology
Chee Kiat Seow
University of Glasgow
Henrik Hesse
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Victor Wang
Singapore Institute of Technology

Programme Committee:
(TBC)

Description:
With the increase in natural disasters worldwide, it is important to explore innovative solutions that can assist in mitigating the impact of such events. IoT and drone technologies can provide valuable insights and data in real-time, supporting rescue workers to provide a fast, efficient response and proactive measures to prevent disasters. The workshop will examine how IoT sensors and drones can be integrated to monitor and predict natural disasters such as floods and wildfires. This includes challenges of deploying IoT solutions in rural areas, including communication, localization, video analytics and artificial intelligence. The workshop will feature experts in the fields of IoT, drone technology, biodiversity conservation, and disease control, who will share their experiences and knowledge on the topic. The technical session will enable participants to apply the latest digital solutions to natural disaster management, biodiversity conservation, and disease control.

Topics of Interest:
This workshop will highlight the latest advances in the development of IoT devices for natural disaster response and challenges in deploying such sensors in nature. We invite contributions on but not limited to the following topics:

- Edge computing for real-time analysis of natural disasters and wildlife
- IoT, computer vision and geo-sensing for applications in nature
- Communication in remote areas
- Applications of drones & mobile robot navigation in nature through AI
- Non-Line-of-Sight (NLOS) localization using AI and ML
- Wi-Fi, 5G, 6G, Ultra-wideband and Bluetooth Low Energy localization

Paper Submission:
All papers must be submitted through eWorks. You must choose the workshop track (Work-16) when submitting your paper in order to be considered for this workshop. The paper should be up to six (6) pages in length. The conference allows up to two additional pages for a maximum length of eight (8) pages upon payment of extra page fees once the paper has been accepted.

The paper can be prepared using the template available through the Authors/ Proposers tab from the WF-IoT conference website main page at:
https://wfiot2023.iot.ieee.org.

An alternative is to use the IEEE Word or Latex tools that can be found through:
https://conferences.ieeeauthorcenter.ieee.org/write-your-paper/authoring-tools-and-templates/.

Authors of accepted papers will need to provide a final version of your paper in PDF format and upload it by the camera-ready deadline and complete the assignment of copyright and release form. For your paper to be included in the proceedings and published in IEEE Xplore, at least one author is required to register for WF-IoT 2023 by the deadline.

More information on the workshop:
https://wfiot2023.iot.ieee.org/1st-workshop-digital-solutions-natural-event-management-leveraging-iot-and-drones-biodiversity

Important dates:
Paper submission: Jul 30, 2023
Notification of acceptance: Aug 21, 2023
Camera-ready submission: Sep 29, 2023
Presentation submission: Oct 2, 2023

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