IFIP IoT 2021
Special Session

Cyber-physical IoT systems in Wildfire Context

Scope

Wildfires are a universal problem that affects several areas of the globe with special incidence on countries with warm summers, such as, Portugal, Spain, Greece, Australia and United States of America. Prevention, early detection, and more effective fire suppression strategies are essential to change this dramatic tendency. Hence, it is urgent and mandatory that the scientific community provides sound, informative and efficient tools capable of improving decision making during wildfires crisis to minimize its negative consequences. Each year, wildfires are growing in number, scope, and deadliness, taking local governments to invest in new cyber-physical systems using internet of things (IoT) technologies that help to predict, detect, and manage fire incidents in forests. These new technologies can include IoT multi-sensor systems to collect field data, advanced processing of earth-observation satellite and UAV imagery, as well as artificial intelligence and interactive visualization techniques to create powerful decision support systems.

Session Organizers

Luis Oliveira*, FCT-NOVA, CTS-UNINOVA, l.oliveira@fct.unl.pt*
André Mora, *FCT-NOVA, CTS-UNINOVA, atm@uninova.pt*

Topics / Keywords

- IoT and WSN to collect field-data during wildfire crisis;
- Artificial intelligence for sensorial data processing;
- Secure localization of IoT nodes in WSN;
- IoT node radio coverage in critical operations;
- Advanced processing of earth observation satellite and UAV imagery;
- Decision support systems for fire suppression management.

All papers must be written in English. Full papers should be at most 18 pages long in total including references and appendices. The paper should be intelligible without having to read the appendices. Poster presentations should be at most 4 pages. Submissions should not be anonymized.
Authors must follow the Springer formatting instructions. For paper submissions go to https://easychair.org/conferences/?conf=ifipiot2021

Deadlines:

Abstract Due - 15 May 2021
Full Paper Due - 15 June 2021
Notification of Acceptance - 31 August 2021
Deadline for final version - 15 December 2021