

Special Session Call for Papers

IoT infrastructures for safety in pervasive environments (IoT4SAFE)

Overview

Internet of Things (IoT) platforms have received a significant amount of attention due to the simplicity and efficiency they bring in creating business value, linking the IoT endpoints to applications and analytics. They are essentially the linchpin in a holistic IoT solution because they enable data generated at endpoints to be collected and analysed, spawning the growth of big data analytics and applications. The rapid increase in the number of network-enabled devices and sensors deployed in physical environments, enriched with information processing capabilities, has allowed the interconnection of people, processes, data and devices, offering enormous potentials across many sectors. The large societal and personal impact of pervasive, mobile and interconnected entities in the web, is already apparent in health, smart factories and cities, security, environmental, agriculture and retail applications. For example, in smart cities, IoT technologies are used from collecting and interrogating city-center parking metrics, to the use of so-called 'smart' street lighting to generate efficiencies. One of the most compelling, however, use case is the technology's use in a safety context. In this context, the challenge is to use humans and devices interchangeably to achieve operational goals and respond to emergency situations, such as natural disasters, vandalisms or missing people in overcrowded places. At the same time, pervasive technologies and eHealth systems seem to offer a promising solution for accessible and affordable self-management of health problems, both in living and working environments. Wearable devices and ambient sensors can be transformed into meaningful lifestyle and work-style monitoring tools, extracting personalised partners and detecting problematic situations to foster a healthy and safe home and working environments.

This special session provides the opportunity to discuss specific research and technical topics in applying IoT technologies in pervasive environments, with a special emphasis on safety in high-risk environments, such as in the healthcare domain (home care and occupational health), public events, food supply chain, energy industries, intelligent transportation, and building & infrastructure management.

Topics

- Public safety and mobile applications
- IoT for safety in Smart Cities
- IoT solutions for improving the effectiveness of emergency response systems
- Smart environments and occupational safety
- Occupational Risk Management and IoT
- Smart Homes and Smart Caring Environments
- Semantic interoperability in IoT platforms, sensors, mobile and wearable devices
- Internet of Things Platforms for improving Safety in Public Places (Smart Cities, e-health)
- Cybersecurity in Public Environments
- Data Fusion and semantically-enriched situation awareness
- Advanced Machine Learning and Artificial Intelligence Approaches for Public Safety Use Cases
- Multi-Sensor Systems for Automated Data Collection in Public Environments
- Forensics, Security, Safety and Privacy in eHealth and IoT

Contribution Types

Proposals for participation in the Special Session can be submitted in the following formats:

- Full Paper (min. 10 max. 12 pages). These include mainly accomplished research results.
- Short Paper (min. 6 max. 8 pages). These are mostly composed of work in progress reports or fresh developments.

All submissions will be peer-reviewed by at least two reviewers. All accepted papers will be included in the conference proceedings, provided at least one author pays the registration fee. The conference proceedings will be published as IMCL2019 Proceedings in the Springer series "[Advances in Intelligent Systems and Computing](#)".

For further questions, please contact the track chair(s).

Important Dates

08 Jul 2019 Submission of complete papers for special sessions

29 Jul 2019 Notification of acceptance

06 Sep 2019 Camera-ready due & Author registration deadline

31 Oct 2019 Conference Opening

Submission

Please visit: <https://www.conftool.net/imcl-conference/> and submit your paper as in the special session "**IoT infrastructures for safety in pervasive environments (IoT4SAFE)**"

Program Committee

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