

Special Issue on
Smart Applications and Services over Interoperable IoT Deployments

CALL FOR PAPERS

It goes without saying that experimentation is one of the basis for technological advances. Being able to test and assess the behavior and the performance of any piece of technology under real-world circumstances is of utmost importance to guarantee proper operation in real life circumstances, increases the acceptance, and, therefore, reduces the time-to-market of these innovative developments. However, despite the attention that the Internet of Things (IoT) has attracted thanks to the large number of application domains where it can play a game changer role, there is still a small percentage of solutions proposed in literature that has been actually assessed in real, large-scale deployments. In this respect, real-life experimentation should play a major role in these developments.

Interestingly, there are initiatives that, in order to improve IoT solutions' maturation and significant rollout, try to support the evaluation of these solutions under realistic conditions in real-world experimental deployments. Moreover, some of these deployments are joining forces to offer the experimenters with access to all of them in a deployment-agnostic manner by aggregating and ensuring the interoperability of data streams coming from different IoT deployments.

This special issue aims to present the results from IoT experimentation carried out over real-world IoT deployments. The special issue welcomes high original research articles in all IoT application domains (e.g., smart city, smart energy, smart agriculture, and smart industry). Developments that have been tested at cross-domain deployments will be especially welcome. The major topics cover real-world experiments on IoT-based solutions. This includes services and applications as well as protocols and/or algorithms that have been assessed over real deployments and thus can provide practical insights on the adoption of IoT technologies to realize smart environments. The special issue will also accept submissions discussing alternatives to enable experimentation over interoperable deployments as well as review articles that gather existing literature both in terms of experimental-based research and innovation and in terms of interoperable IoT deployments for real-world experimentation.

Potential topics include but are not limited to the following:

- ▶ Experimental assessment of IoT solutions
 - ▶ Applications and services for real-world smart environments: design, implementation, and testing
 - ▶ Security and privacy solutions in real-world IoT infrastructures
 - ▶ Data analytics for cross-domain IoT
 - ▶ Management and control of large-scale IoT infrastructures
 - ▶ Learning techniques applied to real-world IoT infrastructures
- ▶ Data collection and management applied to real-world IoT infrastructures
 - ▶ IoT testbeds
 - ▶ Large-scale IoT infrastructures
 - ▶ Interoperable federation of IoT testbeds
 - ▶ Self-monitoring and self-management of large-scale IoT infrastructures
 - ▶ Performance evaluation and scalability of large-scale IoT infrastructures
- ▶ Business models for IoT experimental infrastructures
 - ▶ Business Intelligence Modelling of real IoT deployments
 - ▶ Data marketplace and economy of data models
 - ▶ Sustainability of IoT infrastructures: models and practice
 - ▶ Social impact of IoT infrastructures

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/wcmc/saso/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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