

Call for Papers

Track 6 – IOT: FROM SENSORS TO VERTICAL APPLICATIONS

Track Chairs:

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Scope and Motivation:

We are already witnessing the transformation of objects we interact in our daily lives going through a deep digital transformation: connected to the internet becoming part of an interconnected network of “things” with capability to exchange and communicate with each other as well as offering exceptional ability to capture/sense information about the physical environment and perform actuation. By sharing the information about them (e.g. their status) and sensing the surrounding environment, “things” will increase the awareness and the intelligence of the space we work and live in. The opportunity for extracting knowledge from data produced by the things is limitless and will unleash the development of countless sets of new applications, services and products to the consumer and industrial market. These will encompass several smart spaces such as smart cities, smart homes, smart factories, smart product management and smart farming. The “always connected” paradigm and the multitude of sensors, actuators, and analysis backends that interact with each other create new challenges on the social level, technical level, engineering level, as well as for the security and privacy.

This track “IoT: From Sensors to Vertical Applications” solicits papers that report on advancements in the area of Internet of Things (IoT) technologies and novel IoT applications. Issues can include emerging technologies involving communication, sensing, smart spaces, social impact, sensing fabric integration, data collection and privacy and sensor data quality. Application areas include Industry 4.0, social networking, news gathering, health and safety, entertainment, gaming, sports, and environment.

Main Topics of Interest:

The “IoT: From Sensors to Vertical Applications” track seeks original contributions in the following areas, as well as others that are not explicitly listed here but are closely related:

- IoT paradigms, systems, components, architectures, applications
- Machine-to-Machine (M2M) communication technologies
- Middleware for IoT
- Energy management in IoT devices and applications
- Tools for developing IoT applications
- Cloud vs distributed computing for the IoT
- Edge and Fog Computing for IoT
- Security Testing Smart Spaces and the IoT
- MAC protocols for IoT
- Address management and End-to-End Addressability
- Object, device and service management
- RFID, sensors, and actuator technologies
- Interoperability and data integration
- Quality of data and IoT
- Performance and management of smart spaces
- Experimental approaches
- Mobile social networks

- Mobile healthcare
- IoT applications for Industry 4.0 scenarios
- IoT applications for human-centered scenarios
- Proactive and adaptive IoT systems
- Context awareness and situation awareness
- Privacy and security in IoT deployments
- Data storage and management in IoT applications
- Sensory User Experiences
- AI and Machine Learning for the IoT
- Future Internet cohesion and IoT
- Content/Information Centric Networking for IoT
- IoT enabled Smart Care applications
- Smart Farming and IoT
- Internet of Drones and applications