ACM/Springer Mobile Networks and Applications (MONET) Journal Special Issue on *Smart Object Applications and Management*

In the context of Future Networks, the term "smart objects" is used to refer to commonplace devices, such as sensors and actuators, which are enhanced with computational intelligence as well as with additional capabilities, such as the ability to communicate and/or work with other systems or services. Smart objects are essential elements of cyber-physical systems, and are essential elements of multi-faceted applications in diverse fields such as logistics, smart buildings, intelligent transportation, and smart city applications and services. In particular, smart objects play a foundational role in the up-and-coming R&D area of "smart cities", which aims at fostering sustainable urban development through the ubiquitous interweaving of real-world infrastructure with online and city services.



The MONET special issue on Smart Object Applications and

Management will look into the possibilities that smart objects bring about for various types of networks, including wired, wireless, and cellular, and how new services and applications can be deployed and managed with them. Smart objects incorporate monitoring as well as control functions, and need to communicate with each other (or other systems) and with gateways. In many cases, communication is based on wireless sensor networks integrated with an object, such as parts of a building, logistic goods, vehicles or environmental sensors and actuators. In other cases, communication is based on a hybrid approach, where part of the network is infrastructure-based, while the rest has a varying, self-organizing topology.

We invite authors to submit papers reporting original, previously unpublished research which addresses this new area. The solutions proposed could follow either evolutionary approaches based on current IP-centered architectures, or introduce revolutionary designs and new paradigms. Experimental/testbed and empirical studies as well as implementation/industry results (including field trials) are particularly welcome. Topics of particular interest include:

- Future Internet Architectures based on, or incorporating, smart objects and applications
- Service and application platforms for developing, deploying, and managing smart objects
- Virtualized infrastructures for networks that use smart objects
- Security aspects of smart object networks and deployments
- Network operation and management for smart city objects and services
- Autonomic network monitoring and management for networks that use smart objects
- Knowledge management for systems that use smart objects
- New behavioral paradigms enabled by incorporating smart objects
- Energy-efficient, self-organized access and routing schemes for smart object systems
- Experimental platforms for smart cities
- Testbeds and experimental evaluation of services based on smart objects
- Performance evaluation of large-scale systems that use smart objects
- Standards and enabling technologies for applications and services that use smart objects

Guest Editors

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Schedule

Manuscript submission deadline: 15 October 2012 Notification of acceptance: 31 January 2013 Submission of final revised paper: 15 April 2012

Publication of special issue: 3rd Quarter, 2013 (Tentative)

Submission Procedure

Authors should follow the MONET Journal manuscript format described at the journal web site: www.springer.com/engineering/signals/journal/11036.

Manuscripts should be submitted on-line through www.editorialmanager.com/mone. Authors need to register to submit their papers; select "MONAMI 2012" when prompted for Article Type.

This special issue will feature papers accepted from this open call as well as significantly extended versions of the best relevant papers from the *4th International ICST Conference on Mobile Networks and Management* (MONAMI 2012) to be held in Hamburg, Germany on 24-26 September 2012. See www.mon-ami.org for the conference CfP as well as news and updates.



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