

CALL FOR PAPERS

First International Workshop on the Web of Things (WoT 2010)

in conjunction with the Eight Annual IEEE International Conference on Pervasive Computing and Computation (PERCOM 2010)

29. March - 2 April 2010, Mannheim, Germany

Web site: www.webofthings.com/wot

WEB OF THINGS

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The world of embedded devices has experienced radical changes over the past few years as real-world objects can now easily connect to the Internet. This convergence of physical computing devices (wireless sensor networks, mobile phones, embedded computers, etc.) and the Internet provides new design opportunities and challenges. The Internet of Things has mainly focused on establishing connectivity in a variety of challenging and constrained networking environments, and the next logical step in the evolution in pervasive computing builds on top of network connectivity by focusing on the application layer: how to develop ubiquitous computing applications on top of heterogeneous devices? The Web of Things is the vision that brings embedded devices into the Web by using Web standards as application protocol to interact with things. This workshop aims at bringing together the pervasive computing and Web communities to explore the possibilities for using the core principles and technologies of modern Web architecture (e.g., HTTP, REST, Atom, JSON) for seamless integration of things into the Web and developing applications on top of web-enabled devices (physical mashups). Research contributions are solicited in the following areas:

- Web-based interaction patterns for embedded devices (streaming, eventing, etc.)
- Applications, deployments, and evaluation of Web of things systems
- Human-things interaction models and paradigms (mobile interfaces, etc.)
- User-oriented, context-aware discovery and dynamic search for the real world
- Web composition and macro-programming models (e.g. mashups)
- Semantic technologies for description of devices and services
- Optimization methods for embedded Web servers and applications
- Security, access control, and physical sharing of physical things on the Web

Since this workshop is the first in this area, the goal is to develop a community in this area and provide an interactive forum for researchers to learn and discuss about existing efforts to enable cross-fertilization. Hence, we expect all attendees to read all workshop papers in advance and to prepare questions for each. Presentations shall specifically highlight and address similarities and differences with other accepted papers. This will help to provide a forum to foster future collaboration, beyond the mere presentation of research results. In order to ensure a high-quality technical session, submissions must cover one of the topics above and should not exceed six (6) IEEE conference format pages. Research papers must be original prior unpublished work and not under review elsewhere as they will be published on the IEEE Digital Library. All submissions will be peer-reviewed and selected based on their originality, merit, and relevance to the workshop. Submission requires at least one author to fully register for PerCom 2010 and to present the paper on-site.

IMPORTANT DATES

Paper submission (updated):

November 15, 2009

Notification of acceptance:

December 21, 2009

Camera-ready papers due:

January 29, 2010