INFORMATIK 2004 – Informatik verbindet

34. Jahrestagung der Gesellschaft für Informatik | 22. bis 24.9.2004 | Universität Ulm

Call for Papers

Workshop on Sensor Networks

Workshop at Informatik 2004

Scope of the Workshop

Wireless sensor networks (WSN) – networks of tiny, autonomous devices capable of wireless communication – are a topic of active research in a number of different research communities, ranging from hardware to applications. WSNs are characterized by a need to carefully integrate functionalities traditionally considered to be separate in order to achieve maximum efficiency, especially with regard to energy consumption and management. Hence, a close interaction of research from different backgrounds is required.

WSNs are evolving from simple data transportation networks to functionally rich distributed systems, e.g., because actuators in the network have to be supported. Hence, the question arises how connections between sensor networks and the Internet can be realized. This takes up the theme of INFORMATIK 2004 "Informatik verbindet": At what level can interfaces be realized, how can WSNs be integrated into Internet middleware architectures, can WSNs be treated like distributed data bases?

The goal of this workshop is to bring together researchers from different backgrounds, from hardware to applications, to create a forum where cross-layer integration, novel solutions for specific problems, and the future development of WSN functionalities can be discussed.

Areas of Interest

We are interested in contributions in the following areas:

- Hardware for WSNs and its impact on communication protocols
- Communication protocols for WSNs, MAC and routing, addressing schemes
- Data aggregation in WNSs, handling redundancy, distributed data storage and processing
- Self-organization in sensor networks
- Network Tomography
- Quality of Service in WSNs
- Energy/Efficiency tradeoffs in all protocol layers
- Interface of WSNs to the Internet at different levels (HTTP, SOAP, IP),
- WSNs as distributed data base
- Operating systems and middleware for WSNs
- Prospects of all-IP WSNs, minimal TCP/IP
- WSNs built of distributed microservers, architectures of embedded microservers
- Applications demonstrating the inter-connection between WSN and Internet, testbeds, use cases

Participants

The intended audience are researchers from university and industry, especially working in the areas of sensor networks, embedded systems, communication middleware and databases as well as resource-constrained communication networks as such.

Important Information

The workshop will cover one day, Friday, 24th of September, 2004. Please note the following deadlines:

Submission deadline	**30 April 2004**
Notification about acceptance/rejection	**28 May 2004**
Deadline for camera-ready version	**30 June 2004**

Submissions have to be formatted according to the style guidelines of the Springer LNI series (available via www.gi-ev.de/LNI/index.html). Submissions must not exceed five pages, including figures (submission guidelines will be available on the workshop webpage).
Accepted submissions will be published in the proceedings of the Informatik 2004 conference. Further information will be made available at http://www.inf.fu-berlin.de/inst/ag-tech/projects/sensornets-ws/index.htm.

Workshop Chairs

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