



PWSN 2007

2nd International Workshop on Performance Control in Wireless Sensor Networks

October 23, 2007, Austin, Texas, USA, in conjunction with WICON 2007

CALL FOR PAPERS

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The aim of the 2nd Int. Workshop on Performance Control in Wireless Sensor Networks (PWSN) is to bring together professionals from academia and industry to discuss performance issues in wireless sensor networks. The workshop is planned to be a one-day, peer-reviewed workshop.

Wireless sensor networks are currently the subject of intense research and many prototype installations are currently investigated. However, most of the existing sensor network installations have in common that they are not considered time critical. No immediate action has to be undertaken as a response to the received data. In contrast, many envisioned future application areas of wireless sensor networks (such as plant automation and control, traffic management, medical applications, emergency solutions) require immediate and guaranteed actions. In such environments, data has to be transported reliable and in time through the sensor network towards the end user. To make the networking task more complex, in many applications the end user or the controlling intelligence is located remotely (e.g., remote monitoring, supervision and surveillance applications), and the wireless sensor network interworks with other networks (e.g., fixed infrastructure cellular, Internet).

Due to the lack of appropriate models, components and protocols it is currently very difficult to construct and operate a wireless sensor network with performance guarantees. Thus, the commercial success of wireless sensor networks in many application areas is unsure unless this particular problem is understood and solved.

Areas of interest include, but are not limited to:

- **Models:** Traffic models, channel models, mathematical models to balance performance parameters in the network.
- **MAC protocols:** MAC protocols with deterministic behavior, MAC protocols to balance forwarding performance and energy consumption.
- **Routing and topology control:** Methods to stabilize network topology, topology robustness.
- **Data transport:** Control of data transport delay and reliability, methods to improve data forwarding performance in sensor networks.
- **Operating systems:** Performance optimization and control of sensor network operating systems.
- **Middleware and frameworks:** Middleware/frameworks providing performance guarantees for sensor network applications.
- **Security:** The impact of security features on network performance.

Paper submissions: The paper can report on work in progress. Papers will be submitted by electronic submission through COCUS system: <http://cocus.create-net.it>. The page limit is 8 pages in ACM double column format with fonts not smaller than 10 points. Authors of accepted papers are expected to register and present the paper at the Workshop.

Full details of submission procedures are on the workshop website: <http://pwsn.org>.

pwsn.org

IMPORTANT DATES

Paper Submission Deadline:

July 15 July 30, 2007

Notification of Acceptance:

August 10 August 31, 2007

Camera-ready Manuscripts Due:

September 1 September 10, 2007