

CALL FOR PAPERS

PWSN 2011

3rd International Workshop on Performance Control in Wireless Sensor Networks
<http://www.netrl.cs.ucy.ac.cy/pwsn2011/>

June 29 2011, Casa Convalescència, Barcelona, Spain

In conjunction with the 7th IEEE International Conference on Distributed Computing in Sensor Systems
(DCOSS '11)

Important dates:

Paper Submission deadline:

April 1, 2011

Acceptance Notification:

May 1, 2011

Camera Ready Paper:

May 30, 2011

Workshop date:

June 29, 2011

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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 reliably 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.

The PWSN workshop will bring together researchers and practitioners working on performance issues within wireless sensor networks. The workshop intends to examine research challenges associated with achieving dependability in WSNs, share experiences from real-life deployment of dependable sensor networks, discuss application-dependent wireless sensor-actuator design methodologies, illustrate dependable MAC, network and transport protocols, and in general, explore issues of reliability in WSNs.

Areas of interest include, but are not limited to:

- * Architectures: real-time systems, critical network architectures
- * Applications: Critical applications, application requirements, novel applications and real-world deployments
- * Models: Traffic models, channel models, mathematical models of network performance
- * MAC protocols: MAC protocols with deterministic behavior, MAC protocols to balance forwarding performance and energy consumption.
- * Routing and topology control: Methods to control network topology, services for time, location, and power management, topology robustness, reliability and fault tolerance
- * Data transport: Control of data transport delay and reliability, methods to improve data forwarding performance in sensor networks, data storage, retrieval, and processing.
- * Operating systems: Performance optimization and control of sensor network operating systems.
- * Middleware: Middleware/frameworks providing performance guarantees for sensor network applications.
- * Security: System security and data integrity methods, Impact of security features on network performance.

Paper Submission

Submitted papers must represent original material that is not currently under review in any other conference or journal, and has not been previously published. All submissions should be written in English with a minimum paper length of six (6) and maximum of eight (8) printed pages (in Two-Column IEEE Conference Format), including text, figures, and references. Papers should be submitted through <http://www.easychair.org/conferences/?conf=pwsn2011>