



<http://www.ewsn.org>

EWSN 2008, the European conference on Wireless Sensor Networks 2008, is the fifth of a series of annual meetings.

CALL FOR PAPERS / POSTERS / DEMOS

Wireless Sensor Networks (WSNs) - networks of autonomous sensor devices equipped with wireless communication capabilities - are a topic of active research in different areas, ranging from electronics to communications and computer science.

WSNs are characterized by the need to carefully integrate functionalities traditionally considered to be separate, in order to achieve maximum efficiency, especially with respect to energy consumption and management. Hence, a close interaction of research from different backgrounds is required: expertise on hardware, middleware, communication protocols and application design, is needed.

WSNs are evolving from simple data transportation networks to functionally rich distributed systems, also because actuators in the network have to be supported. Moreover, WSNs, traditionally designed as stand-alone networks, are now considered as part of larger heterogeneous systems having Wireless Wide or Local Area Networks as means to link the environment to applications and data repositories hosted by computers connected to the Internet.

This conference intends to create a forum where researchers with different experience and background can discuss cross-layer approaches, novel solutions for specific problems and envisage the future development of WSN functionalities. Works describing original, previously unpublished research results, are sought. Areas of interest include, but are not limited to:

- **Hardware for WSNs:** transceiver concepts, wakeup radio, antenna design, system integration, process and cost of manufacturing, battery technology, energy scavenging, miniaturization;
- **Physical Layer Techniques for WSNs:** cooperative transmission, Ultrawideband techniques, coding for WSNs;
- **Communication Protocols:** MAC and link layer issues, distributed scheduling and radio resource assignment, routing and transport protocols tailored for WSNs, topology control, data aggregation, gateways to fixed Internet;
- **Operating Systems and Programming Abstractions:** novel concepts and tools for programming and debugging sensor nodes, high-level programming abstractions;
- **Middleware and Service Infrastructures:** (dynamic) configuration and installation support, lookup of available functionalities, group communication, QoS support, integrating WSNs in existing middleware architectures;
- **Information Processing:** storage, querying, compression, fusion, aggregation, cooperative algorithms, event detection, tracking;
- **Security:** primitives for appropriate cryptographic protocols, secure system engineering;
- **Vertical Functionalities:** distributed localisation techniques, time synchronisation;
- **Novel Applications:** requirements, experiences with real-world applications, the role of WSN technology in realizing the visions of Ubiquitous Computing and Ambient Intelligence;
- **Prototypes, Field Studies, and Testbeds:** novel sensor node prototypes, measurements within testbeds, debugging and testing.

Either proposals of full papers, posters or demonstrations can be submitted.

IMPORTANT DATES

Full Papers (no more than 16 pages):

Submission deadline: Sep 1, 2007
Notification of acceptance: Nov 1, 2007
Camera-ready version: Nov 15, 2007

Posters / Demonstrations (no more than 2 pages):

Submission deadline: Dec 1, 2007
Notification of acceptance: Dec 15, 2007
Camera-ready version: Jan 8, 2008

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Submission guidelines available at <http://www.ewsn.org>
For any need, please contact the Chairs through ewsn@deis.unibo.it