

RAWSN 2014

The 2nd International Workshop on RFID and Adaptive Wireless Sensor Networks: Mobility, Security, Localization and Applications To be held in conjunction with the International Conference on NETworked sYStems May 15-17, 2014, Marrakech, Morocco. (NETYS'2014 <http://www.netys.net>)

Adaptive mobile distributed applications require more and more tiny mobile components linked through wireless connections. In this vision we found two categories of applications using either Wireless Sensor Networks (WSN) equipment's or RFID technology. This workshop aim to address hot topics related to these two technologies namely WSN and RFID.

WSNs allow the development of numerous applications in various domains, such as security and surveillance, environment protection, e-health, precision agriculture, intelligent transportation, homecare of elderly and disabled people, etc. Communication in such WSNs has to cope with limited capacity resources, energy depletion of sensor nodes, important fluctuations of traffic in the network, changes in the network topology (radio link breakage, interferences ...) or new application requirements. The workshop promotes the applications of new methodologies in this field with the aim of providing the participants with advanced and innovative tools able to catch the fundamental dynamics of the underlying complex interactions. It fosters the presentation of new cooperative protocols and new schemes for resources allocation and new adaptive applications to sensors networks.

Radio Frequency Identification (RFID) technology enables the non-contact, automatic and unique identification of objects and people using radio waves. RFID technology has gained greater prominence and a higher level of adoption due to its recent advancements and decreasing costs across the years. The applications of RFID have vast potential in improving effectiveness and efficiency in solving industrial problems. RFID tags are placed on objects so that they can be uniquely identified. These objects in motion are traced throughout the supply chain from manufacturer's shop floor, to warehouses, to retail stores. Such a visibility of accurate data brings opportunities for improvement and transformation in various processes, and allows a wide range of organizations to realize significant productivity gains and efficiencies. As the need for auto identification (auto-ID) systems becomes increasingly commonplace in many economic sectors, potential RFID applications include security (RFID enabled passports), e-business (RFID enabled credit cards), e-cash (RFID enabled bank notes) and automated supply chain management. However, there are significant research challenges that still need to be addressed before the widespread adoption of RFID systems.

The main purpose of this workshop is to serve as a forum that brings together RFID and Wireless Sensor Networks' researchers and practitioners from academia and industry to discuss recent developments in RFID and WSN technologies. This workshop will provide a forum to exchange ideas, discuss solutions, and share experiences among researchers and professionals from industry and academia. Papers describing original research on both theoretical and practical aspects of Wireless Sensor Networks and RFID technologies for pervasive computing are solicited.

Topics of Interest

Original contributions in RFID and Adaptive Wireless Sensor Networks are solicited in, but not limited to, the following directions:

- Energy management in wireless Sensor networks
- Adaptive sensor networks
- Sensor network deployment
- Sensor networks with mobile elements
- Cross-layer architectures
- Intelligent sensor nodes
- RFID and sensors: Middleware and software tools
- Sensor-based systems and applications
- QoS and dynamic bandwidth allocation in sensor networks,
- Component generation and dynamic adaptation of the application.
- Performance Evaluation and Modeling in Wireless Sensors Network and RFID
- RFID and sensors channel measurements and modeling
- RFID Localization techniques and algorithms in RFID tag and reader localization
- Security Standards, Frameworks and Protocols for RFID
- Security in mobile sensor and RFID systems

- Specific application contexts with a scientific focus (e.g., healthcare, hospital, military, supply chains)

Paper Submission

Papers should contain original material and not be previously published or currently submitted for consideration elsewhere. **Manuscript** (not to exceed 5 double-column IEEE formatted pages, including figures, tables, and references (http://www.ieee.org/conferences_events/conferences/publishing/templates.html)). At least one author of each accepted paper must register at full registration rate. An oral presentation at the workshop is strictly required. Failure to present the paper at the workshop will result in the withdrawal of the paper from the Proceedings. If you have any questions about paper submissions or the program, please contact any of the listed Program Chairs

Submission link: <https://www.easychair.org/conferences/?conf=rawsn2014>

Important dates:

Paper submissions **April 6, 2014** (*hard deadline*)

Acceptance Notification: **April 30, 2014**

Camera-Ready: **May 07, 2014**

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