By acting as the interface between digital and physical worlds, wireless sensor networks (WSNs) represent a fundamental building block of the upcoming Internet of Things and a key enabler for Cyber-Physical and Pervasive Computing Systems. Despite the interest raised by this decade-old research topic, the development of WSN software is still carried out in a rather primitive fashion, by building software directly atop the operating system and by relying on an individual's hard-earned programming skills. WSN developers must face not only the functional application requirements but also a number of challenging, non-functional requirements and constraints resulting from scarce resources. The heterogeneity of network nodes, the unpredictable environmental influences, and the large size of the network further add to the difficulties. In the WSN community, there is a growing awareness of the need for methodologies, techniques, and abstractions that simplify development tasks and increase the confidence in the correctness and performance of the resulting software. Software engineering (SE) support is therefore sought, not only to ease the development task but also to make it more reliable, dependable, and repeatable. Nevertheless, this topic has received so far very little attention by the SE community.

SESENA13 aims to attract researchers belonging to both the SE and WSN communities, not only to exchange recent research results on the topic, but also to stimulate discussion about the core open problems and to define a shared research agenda. The workshop welcomes both research contributions and position statements. The former will foster in-depth technical discussions of novel results with an audience composed of both SE and WSN researchers. The latter will provide the opportunity for presenting open problems, provocative views, or previously unexplored ideas in an informal fashion. To foster discussion, SESENA13 will also host a special “speakers’ corner” session composed of impromptu presentations where attendees (including those without accepted papers) will have the opportunity to present their own views in very short segments (e.g., 2-4 minutes).

**Topics of Interest**
The workshop focuses on software engineering issues arising in networked (embedded) sensing systems and their possible integration in Internet of Things scenarios. Specific topics of interest include, but are not limited to:

- environment and context modeling;
- development methodologies;
- (macro-)programming languages and compilers;
- testing, debugging, and validation;
- non-functional modeling and analysis;
- security and trust;
- software engineering for socio-technical requirements;
- formal verification and model-checking;
- model-driven approaches;
- middleware systems;
- interfacing WSNs and business services;
- integration of WSNs in IoT applications.

**Submissions**
Prospective participants are invited to submit research or position papers containing original unpublished material describing ongoing work and new ideas, mature research results, or experience reports. Submissions must conform to the ICSE submission format and rules. Research papers may not exceed 6 pages, position papers must be limited to 2 pages. Papers must be submitted electronically through [EasyChair URL TO BE DETERMINED]. The program committee will review all submissions for quality, relevance, and their potential to trigger discussions at the workshop. Accepted papers will be published in the ICSE companion proceedings and on the workshop web site.

**Important Dates**
- Paper submission: February 7, 2013
- Author notification: February 28, 2013
- Camera Ready Version: March 7, 2013
- Workshop: May 21, 2013

**Workshop Organizers**
- Christine Julien, University of Texas at Austin, USA (Program Chair)
- Klaus Wehrle, RWTH Aachen University, Germany (Program Chair)
- Vittorio Cortellessa, University of L’Aquila, Italy
- Kurt Geihs, University of Kassel, Germany
- Luca Mottola, Politecnico di Milano, Italy
- Amy L. Murphy, Bruno Kessler Foundation, Italy
- Gian Pietro Picco, University of Trento, Italy
- Kay Römer, University of Lübeck, Germany & ETH Zurich, Switzerland