

19th of November 2010, Espoo Finland

Aalto University Workshop on Wireless Sensor Systems (WoWSS)

Wireless sensor system consists of networked embedded systems that can sense the environment in timely manner, process the sensor data, and exchange information seamlessly. The applications range from monitoring applications and situation awareness to real-time feedback control or wireless automation. The communication protocols, signal processing, and data fusion methods as well as control schemes need to be co-designed such that they meet the requirements of the particular application that the system is utilized for.

Key words: Real-time embedded systems, wireless sensor networks, wireless automation, data fusion, feedback control, detection and estimation, structural health monitoring

This workshop summarizes the research conducted by the Wireless Sensor Systems group at Aalto University in partnership with University of Vaasa, and Royal Institute of Technology (KTH), Sweden. The workshop brings together the current university research and the Finnish industry in this field.

The WoWSS is a joint workshop organized by the

- Reliable and Real-Time Wireless Automation (RELA), Technology Industries of Finland Centennial Foundation
- Wireless Sensor and Actuator Networks for Measurement and Control II (WISA-II), TEKES NORDITE project
- Generic Sensor Network Architecture for Wireless Automation (GENSEN), TEKES VAMOS project
- Wireless Indoor Situation Modeling (WISM), TEKES TURVA project
- Intelligent Structural Health Monitoring (ISMO), Aalto University MIDE project

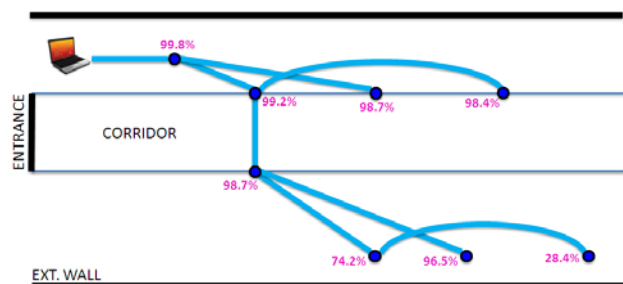
The workshop includes also a track for the Finnish universities to present papers on their current research, work in progress, and demos.

For more information and registration see:

<http://wsn.tkk.fi/en/activities/wowss2010/>

Register by email by sending the following information to terhi.ylostalo@tkk.fi at the latest on November 12, 2010:

- Name, affiliation, e-mail address, and special diet (for coffee breaks)



Tentative program

8:30 – 9:00 Coffee
9:00 – 9:15 Opening Prof. Riku Jäntti (Aalto)
9:15 – 10:00 Plenary Prof. Karl-Henrik Johansson (KTH)
10:00 – 10:30 Lasse Eriksson (Konecranes)
10:30 – 12:00 Parallel Sessions
12:00 – 13:00 Lunch break
13:00 – 15:00 Parallel Sessions
15:00 – 17:00 Posters, Demos & Coffee

Parallel sessions: 4-5 presentations in each 2 h session

- Applications track (GENSEN, WISM)
- Structural health monitoring track (ISMO)
- System design – methods and tools track (WISA-II)
- Advances in wireless sensor networking and applications track (8 papers from open call)

Workshop Chair: Prof. Riku Jäntti (riku.jantti@aalto.fi)

Workshop Co-chair: Lic. Tech. Mikael Björkbom
(mikael.bjorkbom@tkk.fi)

Technical program committee:

Prof. Riku Jäntti, Prof. Heikki Koivo, Lic. Tech. Mikael Björkbom, D.Sc Vesa Hasu, D.Sc June Hwang, D.Sc Upendar Kallu

Workshop management: Lic. Tech. Terhi Ylöstalo (terhi.ylostalo@tkk.fi)

