
Call for Papers

2nd International Workshop on SensorWebs, Databases and Mining
in Networked Sensing Systems (SWDMNSS 2008)

<http://www.osoite.jp/SWDMNSS08/>

in conjunction with SAINT 2008

July 28 - August 1, 2008

Turku, Finland

The development and deployment of sensor networking technologies brought the emergence of Internet-wide infrastructure for networked sensing systems and a collection of heterogeneous sensor networks. In this situation, a sensor network or a collection of distributed sensor networks is one of tremendous information resources on the Internet. This SensorWeb can provide real-time and historical information representing situations, contexts and changes in the real world. It is essential to tap this information resource in order to make networked sensing systems accessible and useable in a large variety of applications.

Sensor networks may be virtually regarded as an enormous database that can provide dynamic real-world information. There are great potentials in all areas of life, if people are able to query and search such information resources as they do it nowadays on the world-wide-web. In addition, the searched results should be provided in an understandable and potentially machine re-usable form. For instance, aggregated, summarized or symbolized sensor information is more useful for understanding complex phenomena than raw sensor information. Such information integration will be brought by novel methods for data mining and information extraction specifically tailored to networked sensing systems.

In addition, information integration utilizing the world-wide-web may allow to combine sensor-specific querying techniques, e.g. according to geographic location, and web search engines, e.g. focusing on content, in order to approach an integrated real world search engine. In order to realize such real-world searching on networked sensing systems, some technologies from different research fields are required:

- a) network technologies to integrate and overlay heterogeneous sensor networks,
- b) database technologies to manage and search spatial and temporal information,

c) mining technologies to extract useful information from sensor databases and other related resources.

This workshop aims to bring together technical papers about networks, databases and data mining for spatial and temporal information and discuss technical issues on integrating sensor networks, databases and Internet technologies. This workshop will open-up a novel and interdisciplinary research area for networked sensing systems covering different research fields such as networks and SensorWebs, databases, information integration and web engineering. It provides the opportunity to discuss key technologies for searching the real-world information provided by networked sensing systems.

Our workshop will focus on data-driven and data-centric aspects of networked sensing systems rather than sensor devices and hardware architecture for networked sensing systems. Original papers on database and network technologies for spatial and temporal information (e.g. sensor data, stream data, time-series data, geographic information and web information) are welcome.

Topics of this workshop are the following (but are not limited):

- * Sensor databases: managing, archiving and searching sensing data
- * Spatial and temporal databases for networked sensing system
- * Query processing architecture for spatial and temporal data
- * Mining, aggregation and integration of spatial and temporal data
- * Stream data processing and mining
- * Data representation and query description language for networked sensing system
- * Overlay network and P2P technologies for networked sensing system
- * Integration of heterogeneous sensor networks
- * Software architectures for sensor networks and databases
- * Networked sensing system for mobile and ubiquitous computing
- * Text mining, language processing, information extraction on the Web
- * Sensor data integration, mapping and visualization
- * Sensor web enablement and standardization
- * Location-based services and geographic information systems (SensorGIS)
- * Experiences on the deployment and experiments of sensor networks

Important Dates for Authors:

Paper submission due: March 1, 2008

Notification of acceptance: March 30, 2008 Camera-ready copies due: May 1, 2008

Author registration due: TBD

Workshop: July 28 - August 1, 2008 (exact date is TBD)

Paper Submission:

Workshop papers should be within 4 pages, no extra page is allowed. The Proceedings of the Symposium and the Workshops will be published, in separated volumes, by the IEEE Computer Society Press. Please mail your submission to <swdmnss2008@osoite.jp>.

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