



Website: <http://www.parc.com/MELT08>

## Call for Papers

# The First International Workshop on Mobile Entity Localization and Tracking in GPS-less Environments (MELT08)

September 19, 2008 – San Francisco, California, USA

In conjunction with ACM MobiCom08



### MELT08 Organization Committee

General Co-Chairs:

Dr. **Ying Zhang**

Palo Alto Research Center

Prof. **Yinyu Ye**

Stanford University

### MELT08 Technical Program Committee

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**Zafer Sahinoglu**

Mitsubishi Electric Research Laboratories

**Michael Saunders**

Stanford University

**Radu Stoleru**

Texas A&M Univ.

### Important Dates:

Submission deadline: **May 16, 2008**

Acceptance notification: **June 23, 2008**

Camera-ready version: **July 7, 2008**

Workshop date: **September 19, 2008**

The Location-awareness is a key component for achieving context-awareness. Recent years have witnessed an increasing trend of location-based services and applications. In most cases, however, location information is limited by the accessibility to GPS, which is unavailable for indoor or underground facilities and unreliable in urban environments. Much research has been done, in both the sensor network community and the ubiquitous computing community, to provide techniques for localization and tracking in GPS-less environments. Novel applications based on ad-hoc localization and real-time tracking of mobile entities are growing as a result of these technologies. It is time to bring leaders from both the academic and industry research communities to discuss challenging and open problems, to evaluate pros and cons of various approaches, to bridge the gap between theory and applications, and to envision new research opportunities in MELT.

The workshop seeks to provide a forum for the state-of-the-art technologies in mobile localization and tracking and novel applications of location-based services. The one-day workshop will have a combination of invited talks, technical presentations and discussions.

Possible topics of interests include, but are not limited to::

#### Technology topics:

- Algorithms for Localization and Tracking
- Opportunistic Localization (using existing signals in the environment)
- Environment Mapping and Map Representations
- Dynamic/ad-hoc Mapping of Environments
- Cheap and Accurate Sensing for MELT (RF, Ultrasound, IR, UWB, RFID etc.)
- Collaborative Localization and Data Fusion
- Combined Camera/Sensor Localization and Tracking
- Hybrid Location-Determination (e.g., RF+vision)
- Secure and Robust Localization

#### Application topics:

- Search and Rescue Operations
- Asset Tracking/Yard Management
- Material/In-process flow control
- Inventory Tracking + Location
- Vehicular Tracking in Intelligent Transportation Systems
- Sports and Entertainment
- Indoor Navigators/Activity Recommenders
- Automatic/Robotic Warehouses/Factories

#### Submission Guidelines:

The workshop seeks papers on preliminary technique results, novel application concepts, software and hardware research toolkits, statements of open challenging problems, mathematical formalization and solutions. Selected papers will be grouped, presented and discussed at the workshop. All paper submissions will be handled electronically. Authors should prepare a Portable Document Format (PDF) version of their full paper. Papers must be no longer than 6 pages, in font size no smaller than 10 points, and must fit properly on US "Letter"-sized paper (8.5 W 11 inches). Margins must be of 1 inch on all edges (top, bottom, left, and right) of each page. Papers must be submitted electronically through the EDAS system (<http://edas.info>). The submission process is the same as the MobiCom08: <http://www.sheridanprinting.com/typedept/mobicom.htm>.

Papers will be reviewed by the Technical Program Committee. Accepted papers will be published by published by ACM Press and distributed at the workshop; copies of the Proceedings will also be available for sale from ACM after the workshop.