

Indoor Localization Competition

Co-located with IPSN 2014, 15-17 April 2014, Berlin Germany



Organizers:

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(Microsoft Research)
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Key Dates:

Contest Registration and Abstract
Deadline: January 10, 2014, 11:59 pm
EST.

Contest Details:

The contest will be held at IPSN'14 conference site. All teams will be given the same amount of time (i.e., a day) to setup and prepare their indoor localization systems in a multi-room designated area. Expect the area to be populated with furniture and people. Detailed instructions on how locations should be represented by each system will be provided in advance. At the day of the evaluation, a person carrying the equipment designated by each team will stand at different known points/areas within the designated multi-room area, and will record each system's location.

Contact Information:

For more information and clarification, you can contact Dimitrios Lymberopoulos (dlymper@microsoft.com)

Sponsors:

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Accurate indoor localization has the potential to transform the way people navigate indoors in a similar way that GPS transformed the way people navigate outdoors. Over the last 15 years, several human-centric approaches to indoor localization have been proposed by both academia and industry, but we have yet to see large scale deployments. This competition aims to bring together real-time or near real-time indoor location technologies and compare their performance.

Eligibility:

Both academia and industry submissions are encouraged. All location techniques, such as ranging, fingerprinting, infrastructure, or device free, are welcome, except those that require end users' manual measurements. Contesters can deploy their own infrastructure of up to 10 devices. Normal RF interference is expected, but no jammers for other deployments are allowed. The results must be shown on a portable device, such as a phone or a tablet/laptop that a person can easily carry around.

Demo submissions that do not meet one or more of the guidelines above will be included in the poster session and will be evaluated as a regular submission, but they will not be considered for prizes.

The competition will take place if **at least 5 teams** respond to this preliminary call for competition.

Competition Categories:

Depending on the nature and number of submissions multiple categories might be defined based on the accuracy (i.e., point-based vs. area based), the size, the cost, or the type (i.e., software vs. hardware) of the proposed solution. The final set of categories will be announced after the registration deadline.

Poster Session:

A poster session dedicated to all competition participants will be organized during the conference. Participants will have the opportunity to explain their system to conference attendees.

Evaluation and Prize:

Results are judged based on both room/zone level accuracy and absolute accuracy, and an award will be given for the top 2 teams in each category. When accuracy ties, infrastructure requirements will be used for tie breaking. The winning team in each category will be invited to present their approach at the conference, and receive a cash award.

Submission Guidelines:

Contesters must submit an abstract describing their approach and deployment requirements by the contest registration deadline. Submissions are treated as confidential until the competition. Submissions must be at most one (1) single-spaced 8.5" x 11" pages, including figures, tables, and references. Submission should follow the exact same format as regular, full IPSN 2014 papers.