

Call for Papers

Enabling Large-Scale Outdoor Mixed Reality and Augmented Reality

ISMAR 2011 WORKSHOP

26 October - Basel, Switzerland

While there is significant recent progress in technologies supporting augmented reality for small indoor environments, there is still much work to be done for large outdoor environments. This workshop focuses primarily on research that enables high-quality outdoor Mixed Reality (MR) and Augmented Reality (AR) applications. These research topics include, but are not restricted to:

- 3D geo-referenced data (images, point clouds, and models)
- Algorithms for object recognition from large databases of geo-referenced data
- Algorithms for object tracking in outdoor environment
- Multi-cue fusion to achieve improved performance of object detection and tracking
- Novel representation schemes to facilitate large-scale content distribution
- 3D reasoning to support intelligent augmentation
- Novel and improved mobile capabilities for data capture (device sensors), processing, and display
- Applications, experiences, and user interface techniques.

The workshop will also showcase existing prototypes of applications enabled by these technologies: mirror worlds, high-fidelity virtual environments, applications of panoramic imagery, and user studies relating to these media types.

This workshop aims to bring together academic and industrial researchers and to foster discussion amongst participants on the current state of the art and future directions for technologies that enable large-scale outdoor MR and AR applications. The workshop will start with a session in which position statements and overviews of the state of the art are presented. In the afternoon, we will follow up with discussion sessions and a short closing session.

26 October - Basel, Switzerland

Call for Participation

This workshop will be an opportunity to present position papers outlining the authors' relevant experience and ideas that may contribute to the discussion during the event. To present at the workshop, submit a short paper of *no more than four pages*, using the ISMAR 2011 template (<http://www.cs.sfu.ca/~vis/Tasks/camera.html>) in PDF format to outdoor_mar2011@navteq.com. The papers will be reviewed by the organizing committee based on:

- Relevance of the main idea or opinion to the workshop topic
- Originality and/or importance
- Technical quality of the evidence and arguments
- Overall readability.

Authors will be notified of the results and the deadline for submitting the final version. The schedule for submission and notification is as follows:

- **Submission deadline:** ~~1 September 2011~~ **15 September 2011**
- **Notification:** ~~15 September 2011~~ **26 September 2011**
- **Final version:** ~~1 October 2011~~ **3 October 2011**

Organizers:

Steven Feiner (Columbia University)
Thommen Korah (Nokia Research Center -- Media Technologies Lab)
David Murphy (Nokia Research Center -- Media Technologies Lab)
Vasu Parameswaran (Nokia Research Center -- Palo Alto)
Matei Stroila (NAVTEQ Research)
Sean White (Nokia Research Center -- Media Technologies Lab)

Program Committee:

Jeff Bach (NAVTEQ Research)
John C. Hart (University of Illinois Urbana-Champaign)
Gang Hua (IBM T. J. Watson Research Center)
Martin Lechner (Mobilizy GmbH)
James Lynch (NAVTEQ Research)
Swarup Medasani (HRL Laboratories)
Ulrich Neumann (University of Southern California)
Yun-Ta Tsai (Nokia Research Center -- Media Technologies Lab)
Charles Woodward (VTT Technical Research Center of Finland)
Suya You (University of Southern California)
Yu You (Nokia Research Center -- Media Technologies Lab)

26 October - Basel, Switzerland



Nokia Research Center

ISMAR 2011 Workshop: Enabling Large-Scale Outdoor Mixed Reality and Augmented Reality

Workshop Web Page: http://www.navteq.com/outdoor_mar2011

26 October - Basel, Switzerland