

## Call for Papers

### Workshop on Visualization in Mixed Reality Environments

November 5, 2012, Atlanta, Georgia, USA

<http://studierstube.org/ISMARVizWorkshop/>

Mixed and Augmented Reality displays extend the user's perception with computer-generated information. This information is typically registered in three-dimensional space, and related to objects and places in the physical world. While individual annotation of objects has historically been a topic of MR research, visualization incorporating multiple related data points or models provides a variety of new research challenges in systems and techniques.

For example, photorealistic augmented reality visualization presents data by adapting additionally presented imagery to the real world condition while illustrative visualization techniques aim at enhancing the understanding of augmented scenarios by carefully combining and mediating real and virtual data. Situated visualization techniques present virtual representations of data in relevant locations in the physical scene. A challenge in many of these techniques is the need to correctly communicate the relationships between physical imagery and virtual data.

This workshop aims at presenting the different aspects in a variety of visualization applications such as organization of data for visualization, real world data sources for visualization, real time photo-realistic rendering techniques, diminished reality rendering techniques, cognitive perception and interaction techniques specific for visualizations in real world environments. We are also interested in ways that the body of research in the visualization community can be applied here. We expect the workshop to be a working event with both presentation of position papers and lively discussion about the key issues and challenges in this research area.

We invite submissions in the field of Visualization for Mixed Reality Environments. Topics of interest include, but are not limited to, MR/AR aspects of:

- Information filtering
- Information presentation, layout, and representations
- Real-Time rendering
- Photorealistic rendering
- Illustrative / Non-photorealistic rendering
- Cognition and perception
- User Interaction and user studies
- System architectures
- Sensors and live data acquisition
- MR/AR applications

Participation is open to all attendees registering for the workshop, not only to presenters of papers. We explicitly invite non-research attendees to join us as well to provide valuable insight into commercial areas of interest and constraints.

The workshop will be an opportunity to present position papers on topics relevant for Visualization in Mixed Reality Environments. To present a position, submit a 2-4 page

summary using the TVCG paper template for ISMAR 2012 papers [<http://www.cs.sfu.ca/~vis/Tasks/camera.html>] by sending it to the email "ISMARVizWorkshop@gmail.com". The position papers will be reviewed by the organizing committee and selected for presentation. Authors will be notified of the results and a final deadline for submitting the final version. The schedule for submission and notification is as follows:

- **Submission deadline: July 17, 2012**

Papers presented at the workshop will be made available to all participants of ISMAR 2012. However, they are not intended to be peer-reviewed publications, and will not be included in the IEEE digital library.

### **Organizers**

- Sean White (Nokia Research Center, USA)
- Denis Kalkofen (Graz University of Technology)
- Christian Sandor (University of South Australia)