

===== Call for Full&Short Papers=====

ISMAR 2015: Augmentation Without Boundaries

The 14th IEEE International Symposium on Mixed and Augmented Reality

29 September - 3 October 2015, Fukuoka, Japan <http://ismar.vgtc.org/>

=====

ISMAR 2015, the premier conference for Augmented Reality (AR) and Mixed Reality (MR), will be held in beautiful Fukuoka, Japan.

The theme of this year's conference is "Augmentation Without Boundaries". ISMAR is responding to the recent explosion of commercial and research activities related to AR, MR, and Virtual Reality (VR) by continuing the expansion of its scope that started last year. ISMAR

2015 will cover the full range of technologies encompassed by the MR continuum, from interfaces in the real world to fully immersive experiences. This range goes far beyond the traditional definition of AR, which focused on precise 3D tracking, visual display, and real-time performance. We specifically invite contributions from areas fundamental to AR/VR/MR, including Computer Graphics, Human-Computer Interaction, Psychology, Computer Vision, and Optics.

===== Notable Changes for ISMAR 2015 =====

- All accepted Full Papers will be directly published in a special issue of IEEE Transactions on Visualization and Computer Graphics (TVCG)
- Program Committee members are being solicited through an open call; we hope that this further increases transparency and widens scope
- A fixed submission date, 15 March, for this and all future ISMAR conferences is introduced to help planning by participants

===== Important Deadlines =====

- Submission: 15 March 2015 (all deadlines: 23:59 US Pacific Time)
- Authors receive reviews: 1 May 2015
- Authors' rebuttal due: 10 May 2015
- Author notification of First Review Cycle: 1 June 2015
- Revised paper submission for Second Review Cycle: 24 June 2015
- Final acceptance notification: 4 July 2015

- Camera-ready version due: 10 July 2015

===== Submission Categories =====

Submissions in two categories are solicited:

- Full Papers: 8-10 pages, presentation at conference, published in IEEE TVCG
- Short Papers: up to 6 pages, presentation at conference, published in ISMAR proceedings
- Successful Full and Short Papers will be held to the same contribution-per-page ratio

In addition, all accepted submissions will be published in the IEEE Xplore digital library. Detailed submission and review guidelines will be posted soon on the conference webpage. Poster submissions will be accepted as usual with a submission date to be announced later.

===== Topics of Interest =====

All topics relevant to AR, VR, and MR are of interest. These include, but are not limited to:

==== Information Presentation ====

- Visual, aural, haptic, and olfactory augmentation
- Multisensory rendering, registration, and synchronization
- Mediated and diminished reality
- Photo-realistic and non-photo-realistic rendering
- Real-time and non-real-time interactive rendering

==== Input ====

- Acquisition of 3D video and scene descriptions
- Video processing and streaming
- Projector-camera systems
- Calibration and registration of sensing systems
- Location sensing technologies (of any kind, including non-real-time)
- Sensor fusion
- Wearable sensors, ambient-device interaction
- Touch, tangible and gesture interfaces
- Smart spaces

=== Output ===

- Display hardware, including 3D, stereoscopic, and multi-user
- Live video stream augmentation (e.g., in robotics and broadcast)
- Wearable and situated displays (e.g., eyewear, smart watches, pico-projectors)
- Wearable actuators and augmented humans

=== User Experience Design ===

- Collaborative interfaces
- Interaction techniques
- Multi-modal input and output
- Usability studies and experiments
- Technology acceptance and social implications

=== System Architecture ===

- Distributed and collaborative architectures
- Real-time performance issues
- Wearable and mobile computing
- Online services
- Scene description and management issues
- Content creation and management

=== Applications ===

- Personal information systems
- Architecture
- Art, cultural heritage, education and training
- Entertainment, broadcast
- Industrial, military, emergency response
- Medical

Emerging areas of particular interest include:

* **HUMAN PERFORMANCE & PERCEPTION:** Learning, training, therapy, rehabilitation, Virtual analytics and entertainment are beginning to leverage the convergence of applied AR/VR/MR research to expand how we experience and enhance the limits of human experience.

* AUGMENTED REALITY WITHOUT 3D REGISTRATION: Lightweight eyewear such as Google Glass can be used for augmenting and supporting our daily lives even without 3D registration of virtual objects. Here, technologies for context, behaviour and object recognition together with other wearable sensors using computer vision, sensor networks and new types of onboard and external sensing technologies become more relevant.

Christian Sandor, Rob Lindeman, and Walterio Mayol-Cuevas ISMAR 2015 Science & Technology Program Chairs