



ISMAR

17th IEEE

International Symposium on Mixed and Augmented Reality October 16th-20th 2018, Munich, Germany

ISMAR is responding to the recent explosion of commercial and research activities related to AR and MR and Virtual Reality (VR) by continuing the expansion of its scope over the past several years. ISMAR 2018 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. All topics relevant to AR and MR are of interest. Note that VR papers are also welcome regardless to their relevance to AR/MR. These include, but are not limited to:

Input

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

Information Presentation

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

Output

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

User Experience Design

- Collaborative interfaces
- Technology acceptance and social implications
- Therapy and rehabilitation
- Usability studies and experiments
- Virtual analytics and entertainment
- VR simulations of AR/MR

Human Performance and Perception

- Interaction techniques
- Learning and training
- Multimodal input and output
- Perception of virtual objects

System Architecture

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

Applications

- Architecture
- Art, cultural heritage, education and training
- Automotive and aerospace
- Entertainment, broadcast
- Industrial, military, emergency response
- Health, wellbeing, and medical
- Personal information systems
- Visual effects / video processing

Deadlines

Submission: 15 March 2018

Final notification: 8 June 2018

Camera-ready version: 10 July 2018

General Chairs

Ulrich Eck, TU Munich, Germany
Otmar Hilliges, ETH Zurich, Switzerland

Science & Technology Program Chairs

David Chu, Google, US
Joseph L. Gabbard, Virginia Tech, US
Jens Grubert, Coburg University of Applied Sciences and Arts, Germany
Holger Regenbrecht, University of Otago, New Zealand

More info:

www.ismar2018.org