

Assignment 3

Date of announcement: 19th Feb 2019
Submission deadline: 12th Mar 2019

Description

In this assignment you will work in groups of 2. Your task is to review one of the state of the art publications in Virtual or Augmented Reality, and give a 20 minute presentation in class.

Grading Criteria

Choose one of the following publications. If you are a thesis-based student you have the option of proposing a publication which relates to your research topic. In the latter case, you will have to send a request to the instructor with information about the paper you are proposing and how this relates to your thesis.

- Efficient VR and AR Navigation through Multiperspective Occlusion Management Meng-Lin Wu, Voicu Popescu
- Saliency in VR: How do people explore virtual environments? Vincent Sitzmann, Ana Serrano, Amy Pavel, Maneesh Agrawala, Diego Gutierrez, Belen Masia, Gordon Wetzstein
- Ascending and Descending in Virtual Reality: Simple and Safe System using Passive Haptics Ryohei Nagao, Keigo Matsumoto, Takuji Narumi, Tomohiro Tanikawa, Michitaka Hirose
- Fabricating Diminishable Visual Markers for Geometric Registration in Projection Mapping Hirotaka Asayama, Daisuke Iwai, Kosuke Sato
- The effect of realistic appearance of virtual characters in immersive environments - does the character's personality play a role? Katja Zibrek, Elena Kokkinara, Rachel McDonnell
- Driver Behavior and Performance with Augmented Reality Pedestrian Collision Warning: An Outdoor User Study Hyungil Kim, Joe Gabbard, Alexandre Miranda Anon, Teruhisa Misu
- Towards a Machine-learning Approach for Sickness Prediction in 360 Stereoscopic Videos Nitish Padmanaban, Timon Ruban, Vincent Sitzmann, Anthony Norcia, Gordon Wetzstein
- Petar Pjanic, Simon Willi, Daisuke Iwai, and Anselm Grundhöfer. Seamless multi-projection revisited.
- Young-Woon Cha, True Price, Zhen Wei, Xinran Lu, Nicholas Rewkowski, Rohan Chabra, Zihe Qin, Hyounghun Kim, Zhaoqi Su, Yebin Liu, Adrian Ilie, Andrei State, Zhenlin Xu, Jan-Michael Frahm, and Henry Fuchs. Towards fully mobile 3d face, body, and environment capture using only head-worn cameras.
- Kangsoo Kim, Luke Bölling, Steffen Haesler, Jeremy Bailenson, Gerd Bruder, and Greg Welch. Does a digital assistant need a body? the influence of visual embodiment and social behavior on the perception of intelligent virtual agents in ar.
- Michael Rietzler, Jan Gugenheimer, Teresa Hirzle, Martin Deubzer, Eike Langbehn, and Enrico Rukzio. Rethinking redirected walking: on the use of curvature gains beyond perceptual limitations and revisiting bending gains.
- Kangsoo Kim, Mark Billinghurst, Gerd Bruder, Henry Been-Lirn Duh, and Greg Welch. Revisiting trends in augmented reality research: a review of the 2nd decade of ismar (2008–2017).
- Stefan Werrlich, Alexandra Ginger, Austino Daniel, Phuc-Anh Nguyen, and Gunther Notni. Comparing hmd-based and paper-based training.
- Joao Barreira, Maximino Bessa, Luis Barbosa, and Luis Magalhaes. A context-aware method for authentically simulating outdoors shadows for mobile augmented reality.

- Charalampos Koniaris, Maggie Kosek, David Sinclair, and Kenny Mitchell. Compressed animated light fields with real-time view-dependent reconstruction.
- Antoine Fond, Marie-Odile Berger, and Gilles Simon. Facade Proposals for Urban Augmented Reality
- David R. Walton, Diego Thomas, Anthony Steed, Akihiro Sugimoto. Synthesis of Environment Maps for Mixed Reality
- Mikko Kytö, Barrett Ens, Thammathip Piumsomboon, Gun A. Lee, Mark Billingham. Pinpointing: Precise Head- and Eye-Based Target Selection for Augmented Reality
- Parinya Punpongsonon, Emilie Guy, Daisuke Iwaai, Kosuke Sato, Tamy Boubekeur. Extended LazyNav: Virtual 3D Ground Navigation for Large Displays and Head Mounted Displays

Submission (electronic submission through EAS only)

Please create a zip file containing your presentation, a readme text file (.txt). In the readme file include your student IDs, and anything else relevant to the submission.