Detailed Program of Application Sessions

EuroXR 2023

Version 2

(November 23, 2023)

Thursday, November 30

Application session 1.a - Training & Learning (11:20 – 11:50)

1. Evaluation of a High-Fidelity Orthoptic Learning Simulation using Unreal MetaHumans
   Georg Meyer, Jignasa Mehta, David Newsham, Ryan Ward and Simon Campion.

2. Open-source virtual reality for vocational training and career guidance
   Mikhail Fominykh and Ekaterina Prasolova-Førland.

Application session 1.b - Architecture, Building and Construction (11:50 – 12:50)

1. The kitchen of the future: Testing user experience through virtual reality
   María Plaza

2. BIM digital twin visualization in MR – Pilot evaluation
   Kaj Helin, Timo Kuula, Vladimir Goriachev and Jaakko Karjalainen.

3. XR Application for Construction Progress Monitoring using 5G and BIM
   Urs Riedlinger, Fabian Büntig, Marvin Voß, Mayra Fahrer, Tamara Graovac, Brian Klusmann, Duc Pham, Jessica Steinjan, Jan-Derrick Braun, Christian Geiger and Leif Oppermann.

4. Making the invisible visible for off-highway machinery by conveying extended reality technologies
   Martijn Rooker, Michael Burmester, Gerald Fritz-Mayer, Clemens Arth, Sebastian Lorenz, Volker Waurich, Manuel Kulzer, Anastasia Sergeeva, Kaj Helin, Markku Pusenius, Benjamin Geslot, Daniel Röck and Pekka Yli-Paunu.

Friday, December 1

Application session 2.a - Techniques, Format, and Standardization (12:30 – 14:00)

1. XR Standardization – a Global Overview
   Christoph Runde.

2. Mobile App Using Augmented Reality and Gamification to Engage Users in Art Exhibitions
   Yoren Gaffary and Lisa Brelet. Star Catcher.

3. "Zauberbuch" - an interactive, projective AR-based approach to show content in a blank book
   Nick Weidensager, Sven Winkler, Christian Fuchs and Franziska Klimant.

4. Enhancing Geometric Coherence in Digital Twins through Localized Augmented Reality-Based Positioning
   Abdelhadi Lammini, Frederic Noel, Romain Pinquie and Gilles Foucault.

5. Enabling X-ray vision via multi-camera fusion for AR applications
   Ioannis Pastaltzidis, Iason Karakostas, Nikolaos Dimitriou and Dimitrios Tzovaras.

6. Building industrial metaverse: technical challenges of real-world collaborative XR application development.
   Yücel Uzun, Urs Riedlinger, Florian Buchholz and Leif Oppermann.

Application session 2.b - User Experience analysis and enhancement (14:30 – 15:15)

1. A Framework for Assessing and Enhancing Presence in (a) symmetrical Remote Collaboration
   Liv Ziegfeld, Maarten Michel, Ivo Stuldreher, Sylvie Dijkstra-Soudarissanane and Omar Niamut.

2. Measuring and analyzing differences of operators' behavior between real and immersive workstations
   Renjie Zhang, Jelena Petronijevic, Alain Etienne and Jean-Yves Dantan.

3. Retrospective on the development and application of the dialog simulation format in VR
   Lidia Yatluk.