

REV2022 Special Session

Call for Papers

Title

Special Session: Mixed Reality in Learning Environments

Acronym

MIRELE '22

Overview

Mixed Reality, used as the overarching term for both augmented and virtual reality technologies, has become a common concept over the last decade. Not only does the gaming industry use Mixed Reality to make users feel more immersed in computer games, but also many industrial enterprises have discovered the use of Mixed Reality technology for staff training and further education. According to the Gartner Hype Cycle for Emerging Technologies of 2019, Mixed Reality is no longer seen as an emerging technology, but has risen to the stage of productivity.

Over the last years, Universities have discovered Mixed Reality as an interesting new technology to foster teaching and learning processes, too. However, university lecturers often struggle to introduce such new technologies into their lectures, even though it might be easier than expected. Oftentimes, a lack of knowledge about both the technical implementation procedures and suitable fields of application deter the lecturers from making the first step into Mixed Reality usage for educational purposes.

The special session MIRELE '22 is designed to focus on successful examples of Augmented, Virtual, and Mixed Reality applications in teaching and learning settings of engineering sciences. This session builds on a series of similar events on previous REV conferences and aims at also displaying the progress made in that field. We invite researchers to hand in manuscripts on experiences made in Mixed Reality Learning Environments using qualitative or quantitative data. The session goes beyond a simple presentation of technological setups but encourages researchers to present their expertise on benefits and challenges as well as transferable insights into learning with Mixed Reality. We are looking for practical examples, first-hand experiences, and research on the development and implementation of such technologies.

Topics

- *Applications & Experiences*
- *Augmented Reality*
- *Collaborative Work in Virtual Environments*
- *Cross-Reality Applications*
- *Human Machine Interaction & Usability*
- *Mixed Reality*
- *Virtual Engineering*

- *Process Visualization*
- *Virtual Control & Measurements*
- *Virtual & Crowd Sensing*
- *Teleservice & Tele-Diagnosis*
- *Telerobotic & Telepresence*
- *Teleworking Environment*
- *Virtual Instrumentation*
- *Virtual Reality*
- *Virtual Laboratories*

Program Committee

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