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# International workshop on Cross Reality, Artificial Intelligence, and Online Learning

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location: online, as part of the 2021 REV conference (02/24-26/2021)

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## Workshop Lead

Andreas Pester, British University in Cairo, Egypt

Dominik May, University of Georgia, USA

Michael E. Auer, Carinthia University of Applied Sciences, Austria

## Workshop Description

Cross Reality (XR) technologies, Artificial Intelligence (AI), and Online Learning (OL) are now well established in higher education and professional training settings. XR technologies - understood as an umbrella term for all applications using augmented, virtual and mixed reality technologies - are used in diverse scientific fields to enhance and innovate the instructional design, e.g., to bring learners into virtual learning environments, which otherwise are not accessible in the real world. AI and machine learning can support learning processes by offering recommendations and assistance to learners for simulation-based training, e.g., in medical and surgery training. OL already has a long standing history in education and instructional design. Over the years, OL has influenced a number of research fields like computer-based learning, computer-supported collaborative learning, computer-assisted training, and many more.

Over the last few years, it has been clearly detectable that the above-named fields are slowly merging and that current research is more and more focusing on developments at the interface between CR, AI, and OL. This workshop intends to start a joint and fruitful discussion between experts from industry and academia to detect distinctions and commonalities in terms of advances in technology, instructional development, and educational research. The goal is to develop future-oriented ideas and concepts for both industry training and higher education on the basis of recent developments and current trends.

The workshop is planned as a 3 h online workshop in advance of the 2021 "International Conference on Remote Engineering and Virtual Instrumentation". In the case of greater interest, we intend to hold a follow-up event later 2021.

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