Seminari di Dipartimento

Aula 102, Dipartimento di Fisica
Lunedi 19 gennaio 2026 - ore 14:30

Virtual and Augmented Reality for Health and Safety

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Virtual Reality (VR) and Augmented Reality (AR) are rapidly transforming the fields of learning and training. In this seminar, the design and evaluation of VR applications across two critical domains of training - Health and Safety - will be introduced, drawing on 25 years of experience leading immersive technology projects at the HCI Lab of the University of Udine (http://hcilab.uniud.it).

In the Safety domain, VR, and also VR-based educational games, will be examined as potential solutions to a well-known problem: the ineffectiveness of traditional media, such as safety cards and safety briefings, in fostering safety awareness and knowledge among the general public. The seminar will show how the effective design and evaluation of such systems requires a multidisciplinary approach that integrates both computer science and psychology. Concepts will be illustrated with practical examples from systems that Human-Computer Interaction Lab has designed, evaluated, and deployed. For instance, public applications created in collaboration with the U.S. Federal Aviation Administration, which have been installed by tens of millions of users worldwide.

In the Health domain, the talk will show how the immersive techniques developed are being applied both to the professional training of doctors and nurses and to therapeutic interventions for patients dealing with conditions such as chronic pain, anxiety, and eating disorders. Finally, this seminar will reflect on the integration of Artificial Intelligence into these scenarios, highlighting some of its contributions and drawbacks.

The seminar is in presence up to the maximum occupancy of the lecture hall.