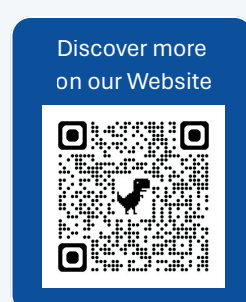




A HORIZON EUROPE PROJECT BRINGING XR CLOSER TO THE REAL WORLD



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VICTOR-XR brings together **XR, multimodal sensing, digital twins and AI** to develop **new ways for virtual and physical environments to interact in real time.**

The project explores how XR can become more consistent, responsive and reliable when used in real-world environments.



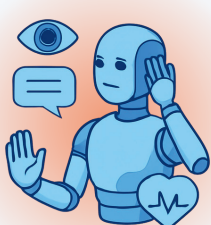
THE PROBLEM

Today, XR systems do not always reflect the physical world accurately or in real time.

Gaps between what users see, hear, touch and experience can affect the quality, reliability and usability of XR applications in real-world environments.

THE INNOVATION

VICTOR-XR combines three key technological elements to improve interaction between people, virtual content and the physical world.



MULTIMODAL SENSING

Combining vision, haptics, speech, gaze and biosignals to capture user interaction and environmental conditions.



REAL-TIME DIGITAL TWINS

Synchronising physical environments and their virtual representations through continuous data exchange.



COGNITIVE CO- PILOTS

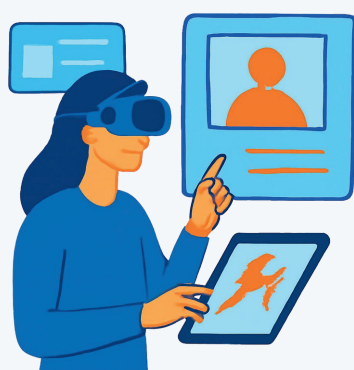
Providing safe and explainable support during XR interaction and task execution.

INTEROPERABLE PLATFORM

An open technology layer connects XR devices and digital twins to the systems already used in factories and hospitals, no need to switch to a single supplier.



LEARNING BY EXPERIENCE



Every task or exercise carried out through VICTOR-XR, an assembly step, a therapy session, a correction made in real time, can become training material. Trainers can build XR learning modules without coding, turning real activity into lessons and recognised digital credentials.

TESTED IN THREE REAL-WORLD USE CASES



AUTOMOTIVE:
Manufacturing & assembly
Supporting workers in industrial tasks through XR.



ROBOTICS
Human-robot collaboration
Enabling new ways for people and robots to interact.



REHABILITATION
Virtual environments
Exploring XR-based approaches for patient recovery.

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