

Immersive Lab



Centre of Expertise AP University
of Applied Sciences & Arts
Active in High-tech / Digital -
Health - Environment

Virtual, Augmented and Mixed Reality have experienced a tremendous growth in recent years. They also have numerous applications in life sciences. Research coordinator Dr. Silvia Van Aken explains why Immersive Lab is the ideal partner for your company.

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“Our center of expertise brings together research, knowledge and technology around immersive technologies: eXtended Reality (XR), 3D scanning, motion capture suits, 360° recording and generative AI (photo and video production without camera). XR covers the entire spectrum of technologies that combine real and virtual environments with computer-generated interactions

(CGI) between humans and machines. Through our lending service, we make this research infrastructure available to students, researchers and companies.

Immersive Lab conducts R&D for companies that want to explore and apply the latest capabilities of XR. We advise companies on a concept or the development of an innovative application. Or we test the effects of such an application through user testing. We can also connect researchers and companies with XR manufacturers, hardware and software developers and other partners within our network.

► Immersive Lab conducts R&D for companies that want to explore and apply the capabilities of eXtended Reality.

We closely follow innovative developments and also conduct research into new applications ourselves. For example, we are working on ‘embodiment in VR’: the combination of a VR experience with multisensory stimuli. This technology can be used very broadly, e.g. for virtual ergonomics, pain management, training, entertainment or facilitating behavioral change. We also pass on our knowledge through workshops, lectures and demonstrations. For example, we organize a Summer School and offer tailor-made training.

Collaboration with companies and other research institutions is an intrinsic part

of our DNA. It allows us to conduct evidence-based research and develop new insights. Immersive Lab supports companies’ R&D through immersive technologies. For example, we can support in the development of an innovative immersive application or investigate its effects.”

Do you want to explore the possibilities of this new technology or use it in your company? Please contact research coordinator Dr. Silvia Van Aken.

Photogrammetry studio for photorealistic 3D scanning.



Immersive Lab

Virtual pain management with VR glasses during labor.



Immersive Lab is ...

Virtual Reality (VR) & Augmented Reality (AR) · 3D scanning (people and objects) · Motion capture suits · Embodiment · Empathy · User testing · Eye tracking

► **We are very satisfied with the collaboration with Immersive Lab. Their XR expertise is undeniable. Combined with an enthusiastic hands-on mentality and excellent project management, this led to a wonderful end result!**

Quote from City of Antwerp Heritage Library

Research groups and expertise

Immersive Lab combines the expertise of:

- a creative team that creates visual worlds with computer-generated images;
- a technological team that makes these applications interactive;
- a user research team that investigates its effects.

Immersive Lab contains high-tech infrastructure and facilities to develop and test XR experiences.

We have expertise in extended reality (XR), Generative AI, 3D scanning, 360° recording, motion capture suits and projection mapping via the immersive cube.

Immersive Lab works closely with other Centers of Expertise within the AP University of Applied Sciences & Arts as well as with other colleges and universities, on specific applications.

We use our extensive network to stimulate cooperation between companies and other partners.

Immersive Lab is a founding member of the XR Valley, the professional association of XR in Belgium. XR Valley takes various initiatives to stimulate the use of XR. It organizes inspiring demonstrations, facilitates new R&D opportunities and looks for financing options for budget-intensive projects.

Collaboration is possible through ...

Co-development · Contract research · Customized services · Use of equipment and facilities · Customized training · Doctorates · Master's theses and Bachelor's theses · Internships

Unique features of our equipment

Immersive Lab has high-tech infrastructure and facilities to develop and test XR experiences:

- Immersive Cube;
- multiple Insta 360° cameras;
- fullbody-3D-scanner;
- smart suits and gloves;
- VR microphones;
- Cleanbox (UVC cleaner for VR glasses)

The Immersive Lab has a lending service where companies, research institutions, organizations and individuals can borrow VR material. The material can be tested in the Immersive Lab (by appointment, max. 1 hour).



Contact Immersive Lab

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