

Envisioning the EUt+Verse: A Common VR Space for the European University of Technology Consortium

Odette Gabaudan¹, Dimo Chotrov², Anna Nicolaou³, Susanna Nocchi⁴, and Antigone Parmaxi⁵

¹ Technological University Dublin, Dublin, Ireland

² Technical University, Sofia, Bulgaria

³ Cyprus University of Technology, Limassol

⁴ Technological University Dublin, Dublin, Ireland

⁵ Cyprus University of Technology, Limassol, Cyprus
odette.gabaudan@tudublin.ie

Abstract. This session aims to present the vision and proposed specifications for EUt+Verse, a transcultural, multilingual, and trans-institutional VR environment for the Erasmus funded European University of Technology (EUt+) consortium. Starting from a project aimed to prepare EUt+ students and staff to overcome language and cultural barriers to international mobility, the EUt+Verse has developed into a more complex vision. The session will describe the work process undertaken by XR Project Team and share the Team's experience with framing the project in accessibility and ethical approaches to XR.

Keywords: Transculturality, Multilingualism, Accessibility.

1 The European University of Technology Project

The European University of Technology (EUt+) [1] is an Erasmus funded project that brings together eight European universities of technology, namely,

- Technical University of Sofia - Bulgaria (TUS)
- Cyprus University of Technology - Cyprus (CUT)
- University of Technology of Troyes - France (UTT)
- Darmstadt University of Applied Sciences - Germany (H_DA)
- Technological University Dublin - Ireland (TU Dublin)
- Riga Technical University - Latvia (RTU)
- Technical University of Cluj-Napoca - Romania (UTCN)
- Technical University of Cartagena - Spain (UPCT)

The EUt+ consortium aims to collaborate at co-constructing the future 'from eight to one' integrated, diverse, and inclusive European University of Technology. The EUt+ shared vision is articulated around a central pillar, 'Think Human First', as the consortium views technology as human-centred, about people, about values, about actions, about objects in the immediate or distant environment (see Fig. 1).



Fig. 1. A Ut+ principles [2].

The EUt+ project is organised around eight work packages. Work Package 2 (WP2) deals with themes of inclusiveness, embeddedness, multiculturalism, and multilingualism.

2 XR Project Team

The XR Project Team works within WP2, in the EUt+ project. The Team involves 20 participants across the eight universities within the EUt+ consortium. About a third of the participants come from a technical background, with expertise in designing with and for immersive technologies, such as virtual reality or augmented reality. The rest of the team's background is in the Humanities, with many having an expertise in intercultural and transcultural studies and/or Computer Assisted Language Learning. The Team was tasked with analysing the needs, visualising, designing, and developing an Extended Reality (XR) approach to support students and staff of the eight participating universities overcome language and cultural barriers in international mobility, as they collaborate and form closer bonds. The aim XR Project Team's work is in line with the EUt+ vision as illustrated in Figure 1, above. It is to enhance the experience of physical student and staff mobility and collaboration, and to ensure that international opportunities for students are as inclusive as possible, while supporting plurilingualism and multiculturalism through immersive technologies.

3 EUt+Verse

The goal of the XR Group is that each student registered at the European University of Technology (EUt+) as well as all staff of the EUt+ will soon feel at home on every campus and be able to freely move from one country to another having been exposed to the multicultural and multilingual environment through the EUt+Verse.

3.1 EUt+Verse, the Vision

EUt+Verse is envisioned as an environment that can be used for meetings, work collaborations, curricular integrations as well as in the context of social, fun, and supportive activities. We want to make it easy and enjoyable to connect and initiate joint projects – courses, research projects, but also social, cultural and community building projects.

Through EUt+Verse staff and students will be given access to a three-dimensional space that will allow them to visit and experience the eight different campuses in the eight countries, connect with their counterparts and explore other cultures and languages. The applications and the affordances envisioned for the VR platform focus on the creation of familiarity with the different campuses, students and staff, and the lowering of thresholds for meeting new people. This will ideally facilitate the creation of friendships, work collaborations, and lasting student and faculty relations.

3.2 EUt+Verse, Work Process, Accessibility, and Ethical Approaches

The diversity of disciplinary backgrounds in the EUt+ Team made for a challenging but rich working environment as the group went through a period of adaptation to come to understand each other's respective 'languages' in terms of disciplinary expertise and non-native use of English.

The EUt+ XR team's collaboration evolved in different stages, following an iterative process, encompassing practical decisions on technical choices and, at the same time, dealing with the challenge to meet its objective for inclusivity. Integrating principals of Universal Design for Learning (UDL) and ethical considerations added to the multi-layered considerations needed to meet the project specifics for functionality, and multicultural and multilingual experience for all.

References

1. European University of Technology (EUt+), <https://www.univ-tech.eu/>
2. EUt+ Mission Statement, <https://www.univ-tech.eu/mission-statement>.