WORKSHSOP: Shaping the Future: XR Technologies for Inclusive and Educational Cultural Heritage

Genova, ex Stazione Genova Pra
4-5 June 2025

June 4th 2025

14.00 -14.15 *Welcome – Brief introduction to the CTE Genova Project*
Silvia Campailla (Municipality of Genova)

14.15 - 15.00 Marco Sacco Research Director and Head of CNR-STIIMA subsidiary - Institute of Intelligent Industrial Technologies and Systems for Advanced Manufacturing and Former president of EuroXR (European Association for Extended Realities Technologies) **XR an European Perspective on the Current State and the Future: which Enhancements for Cultural Heritage**

15:00 - 16:10 *From real to virtual* – *This section explores the full pipeline that turns physical artefacts and sites into faithful digital replicas. Speakers will cover different reconstruction aspects, showing how to preserve authenticity while enabling new research opportunities.*

15:00-15:30 Holger Graf Head of Department Virtual & Augmented Reality of Fraunhofer Institute for Computer Graphics Research IGD **AI empowered XR technologies for the digital conservation, restoration and communication of cultural artefacts**

15:30-15:50 Ugo Erra Associate Professor of the University of Basilicata **High-Fidelity 3D Reconstruction and AI Interaction for Immersive Heritage Access**

15:50-16.10 Michela Mortara Senior researcher at CNR-IMATI **Digitization and 3D Modelling of Culturally and Historically Significant Artefacts and Sites**

16:10-16:30 *Coffee break*

16:30 –18:10 *Interactive Virtual Cultural Heritage Experiences* - *This session focuses on designing interactive applications through digitized heritage. Case studies will demonstrate multi-modal interaction, narrative design, and gamification strategies that deepen visitor engagement and foster co-creation*

16:30-17:00 Sofia Pescarin Senior researcher at CNR-ISPC **Designing Hybrid Experiences for Cultural Heritage (Brancacci POV, Aldrovandi Digital Twin, Iseum XR): from co-design to prototyping and experiment planning**

17:00 -17:30 Manuela Chessa Associate Professor of the University of Genoa **Perceiving and interacting in XR: enhanced grasping and tangible computational thinking**

17:30-17:50 Chiara E. Catalano Senior researcher at CNR-IMATI **A serious game in augmented reality to explore historical sites**

17:50 -18:10 Brigida Bonino Researcher at CNR-IMATI **Exploiting VR to improve accessibility and   engagement in cultural heritage visits**

June 5th 2025

09:30 –09:45 *Welcome and introduction second day*

09:45 – 10:45 Towards Accessible and Inclusive VR – *This section explores methods for ensuring that VR heritage applications are usable by people of all ages, abilities, and backgrounds.*

09:45-10:15 Maite Frutos-Pascual Senior lecturer and active researcher at Digital Media Technology (DMT), Birmingham city University **Breaking Barriers: Accessibility and Inclusion in XR Experiences**

10:15 -10:45 Stella Sylaiou Assistant professor at the Department of Surveying Engineering and Geoinformatics of the International Hellenic University **Designing Inclusive Virtual Heritage Experiences for Older Adults: Key Considerations for Engaging Digital Cultural Narratives**

10:45-11:15 Lobna Sameer Hassan Associate Professor of Sociotechnical Transitions in Services, LUT University **Inclusion across the educational pipeline in   AI- and XR-based education**

11:15-11:45 coffee break

11:45 – 13:15 AI and XR in education *Discover how artificial intelligence enriches extended-reality experiences to create compelling, curriculum-aligned learning tools. Sessions will showcase intelligent tutoring, adaptive storytelling, and data-driven assessment that connect learners with cultural heritage in new ways.*

11:45-12:15 Joaquin Jorge UNESCO Chair on AI&XR and Full Professor at the Department of Computer Science and Engineering of Instituto Superior Técnico

12:15-12:45 Maria Blanca Ibanez Espiga Associate Professor in the Department of Telematics Engineering at the Universidad Carlos III **Learning Beyond the Screen: What VR and AR Are Teaching Us in the Classroom**

12:45-13:15 Francesco Ferrise Full Professor at Polytechnic University of Milan *Virtual Reality and Artificial Intelligence for Training and Skill Transfer*

13:15 – 14:15 Lunch

14:15 - 14.45 Diego Coglitore (APRE) - Upcoming calls in Horizon Europe

14:45 – 15:30 Presentations of CTE proofs of concepts

15:30 – 16:15 Demos of CTE proofs of concepts

16:15 – 16:30 Closing