UPT Universitatea Politehnica Timișoara

1ST CONFERENCE IMMERSIVE HERITAGE

18 March 2026

# EUreka3D-XR (2025-2026)

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# EUreka3D-XR European Union's REKonstructed content in 3D to produce XR experiences (a continuation of EUreka3D)

EU project co-funded by the **Digital Europe Programme**

Duration: 2 years from January 2023 till December 2024

Coordinator: Photoconsortium International Association

Partners: CRDI, Bibracte, Museo della Carta, Cyprus University of Technology, EGI, Cyfronet, imec, Europeana Foundation

Objectives:

- Supporting actions for the common European data space for cultural heritage

- Aim: to develop innovative re-use scenarios and tools that enable the creation of extended reality (XR) applications, expanding the features and services already developed and tested in the EUreka3D project.
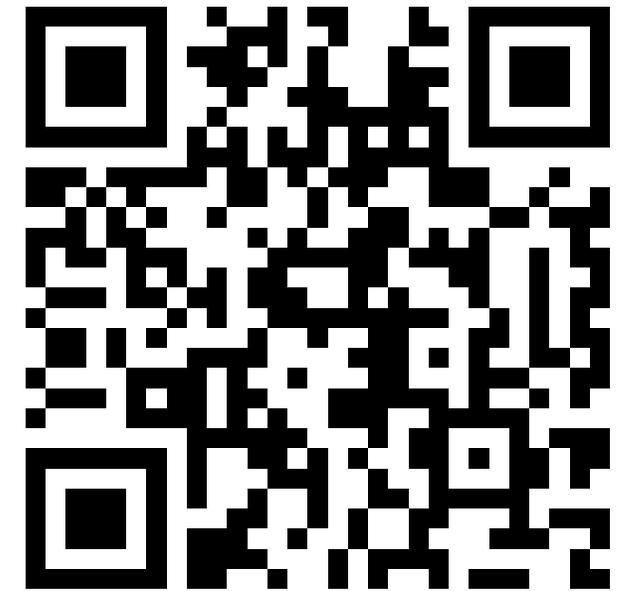
# EUreka3D-XR Toolbox: instruments for CHIs and creators

Five tools to enable cultural heritage institutions and creative professionals to experiment with new forms of **XR storytelling** while reusing their digital collections.

By lowering technical barriers and promoting accessible workflows, the EUreka3D-XR Toolbox supports institutions in exploring **immersive technologies** and developing new ways to engage audiences with cultural heritage.

The first prototype of each tool was delivered in October 2025, first demonstration in Girona in January 2026, the **final release will be presented at the final conference, hosted in the frame of the Digital Heritage Summit in Cyprus, in May 2026.**
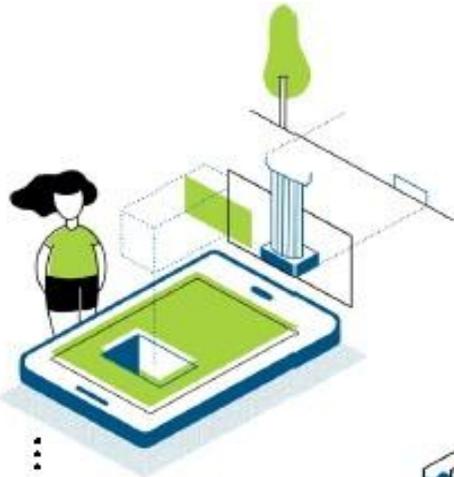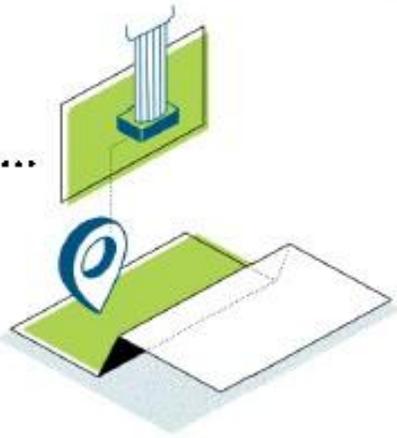
**Read more about the tools and access materials**

# The five tools of EUreka3D-XR Toolbox

- To enable use and reuse of digital cultural content including 3D
- To create outputs that enhance the cultural dimension of visitor's experience
- To access collections, sites, urban transformations within innovative settings

**AR TOUR BUILDER**

Online tool for creating custom AR tours, retrieving 3D objects from Cultural Heritage repositories and associating them with locations on a map.
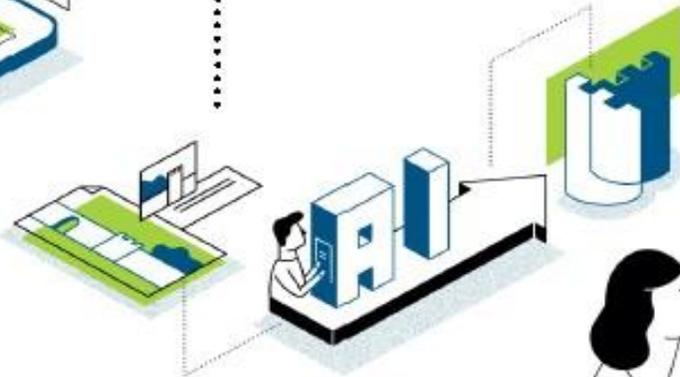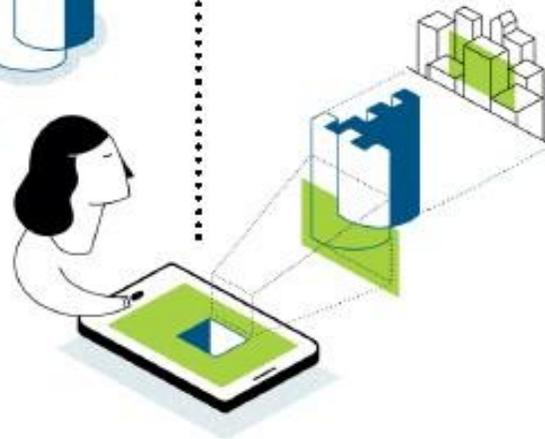
**AI 3D BUILDER**

3D Modelling software pipeline that reconstruct cultural heritage sites using AI technologies, digital photo and archival documents.

**3D XR STUDIO**

Web tool for creating XR/AR experiences using a range of predefined layouts for UX and UI.

**AR TOUR EXPERIENCE**

Mobile app that allows visitors to experience phygital tours, superimposing 3D digital objects onto the physical world.

**AVATAR BUILDER**

AI-based tool to create the digital representation of human characters that interact with visitors of cultural heritage sites.

# Three XR scenarios of use

The five EUreka3D-XR tools are used in three demonstration scenarios that serve as proofs of concept, case studies and inspirations for other CHIs to try the tools and create their XR storytelling.

The three scenarios were demonstrated at the Girona event on 29 January 2026.



**GIRONA (CAT)**
The virtual visualisation of the middle-ages walls of the city of Girona.

**BIBRACTE (FR)**
The AR narrative of the hidden side of the Bibracte archaeological site.

**PAPHOS (CY)**
The creation of a new life of Saint Neophytos Englystra in Cyprus in the virtual space.
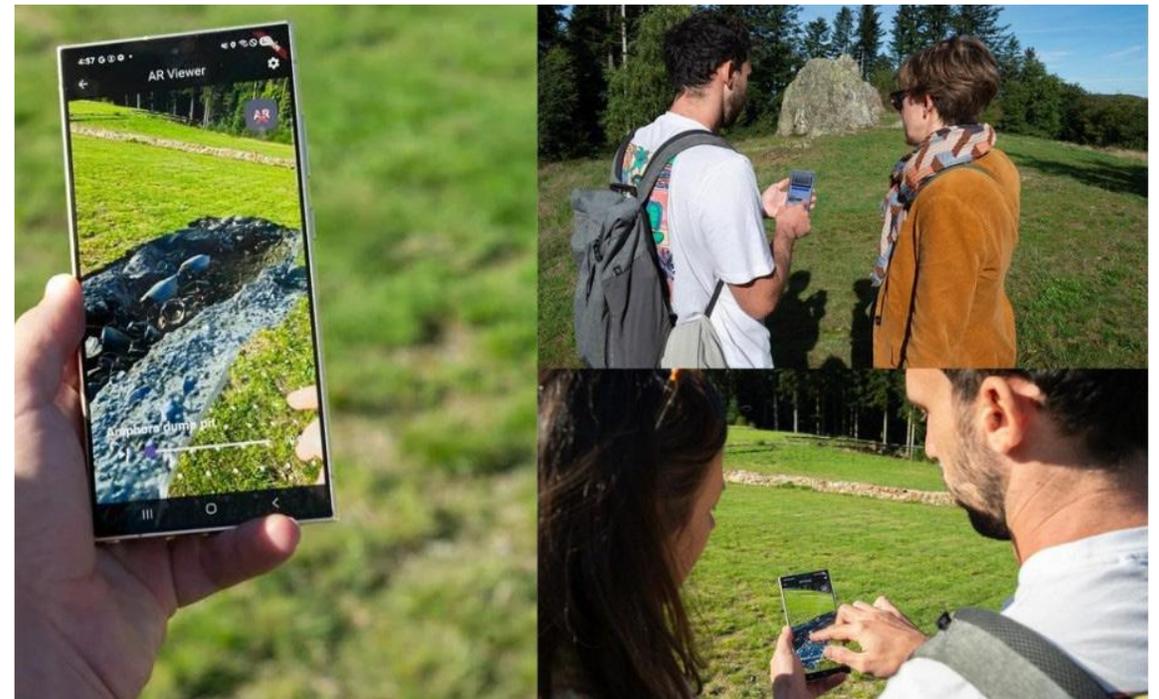
The XR user experiences may be accessed on location, with mobile devices or virtual glasses/headset.

The XR scenario for each pilot are also made available in different formats:
- Collections and models published in Europeana
- Case studies and illustrative videos
- Virtual reality experience on browser

# EUreka3D and EUreka3D-XR support the common European data space for cultural heritage

EUreka3D initiative supports the common European data space for cultural heritage led by Europeana Foundation:

- **EUreka3D Data Hub** is an integrated service in the data space (OAI-PMH interface, embedded 3D viewer, based on EDM and its recent extension)

- **EUreka3D-XR tools** interoperate with the data space to access 3D digital content and produce XR experiences

- **EUreka3D-XR scenarios** promote the data space demonstrating concrete innovative XR applications

- EUreka3D and EUreka3D-XR provide **new contents in the data space**, including a rich corpus of open access digital cultural contents and editorials

- EUreka3D and EUreka3D-XR deliver a programme of **capacity building** events and activities to share knowledge and build competence on cultural heritage digitisation

# Capacity building

Lowering barriers is a priority for us.

With our events we aim to provide inspiration and guidelines, and to connect learning offer to real world case studies and tools.

The EUreka3D-XR capacity building programme addresses the full lifecycle of 3D data:

- The challenges and needs for creating reusable 3D content in good quality
- To develop a common understanding of paradata and its application to 3D documentation
- Safe storage and management of 3D CH datasets in the European-based cloud
- Standard formats, authenticity and preservation for 3D digitisation of CH content
- Publication of 3D content in Europeana
- Stories and challenges of reuse

**Conferences & Events**

**Recordings**

**Guidelines**

**Manuals & Tutorials**

**Online courses**

# The lifecycle of 3D Data in Cultural Heritage

- April 2026

- Webinar in two parts, 90 minutes each

- Session 1: **Plan, collect, process and preserve**
  - *addressing how 3D data is created, processed and sustainably preserved*

- Session 2: **Sharing and reusing 3D data**
  - *discussing platforms, processes, IP challenges, XR scenarios in practice*

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**WEBSITE: https://eureka3d.eu/**

**BLOG: https://www.digitalmeetsculture.net/projects/eureka3d-blog/**

# Final Conference in Cyprus



EVENT IN PRESENCE

ORGANIZED IN THE CONTEXT OF EUROMED DIGITAL SUMMIT 2026

CELEBRATING CY EU PRESIDENCY

**Register: https://eureka3d.eu/eureka3dxr-final-event/**

# Thank you!

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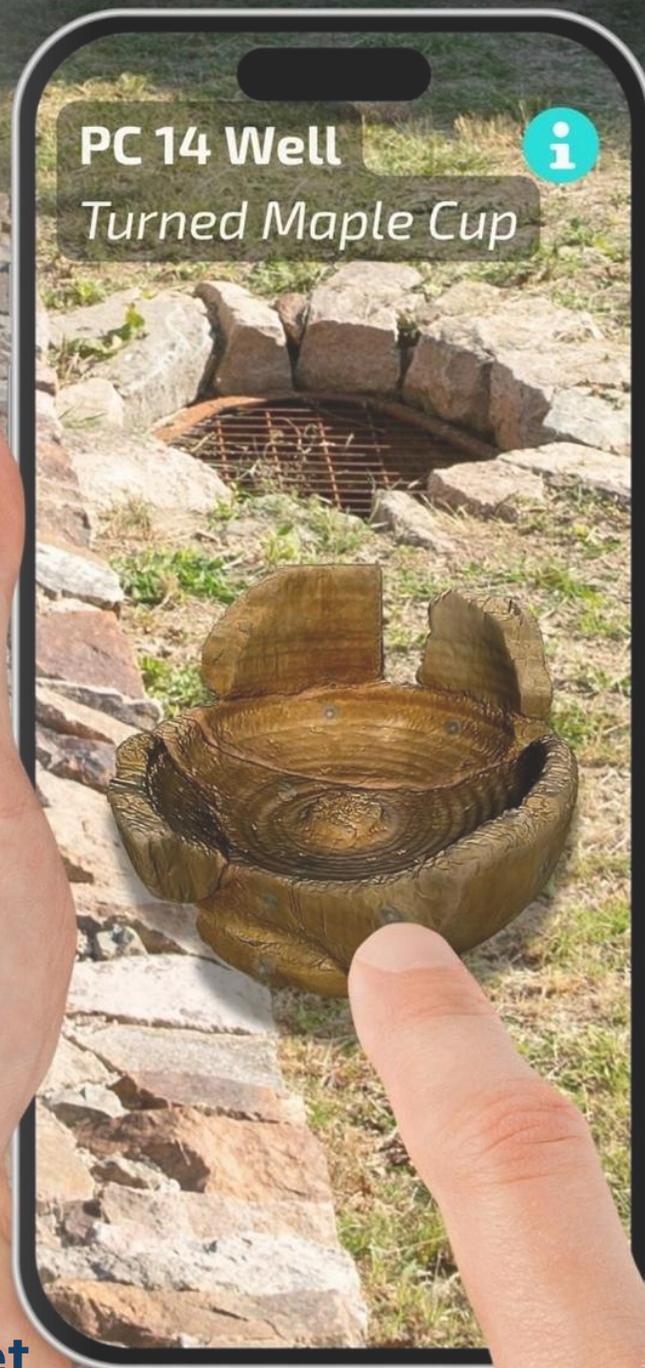PHOTO CONSORTIUM

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PC 14 Well
Turned Maple Cup

Image: courtesy of Bibracte