

## PRESS RELEASE

**The University of Pisa is launching AUTOMATA, a new EU-funded project revolutionizing archaeological documentation with AI-enhanced, cost-effective digitization**

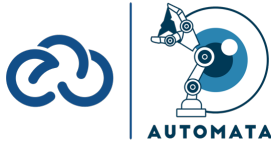
Archaeology focuses on material culture, revealing the stories embedded in objects, offering insights into technology, daily life, relationships, the environment, and human histories. However, the labour-intensive process of documenting and classifying finds, despite digitization efforts, restricts access to countless artefacts, thus limiting the creation and sharing of knowledge.

The “AUTOMated enriched digitisation of Archaeological liThics and cerAmics” project (AUTOMATA) seeks to enhance this process by enabling low-cost and time-efficient digitisation of archaeological objects. This cutting-edge collaborative scheme, supported by the EU programme Horizon Europe for the period 2024-2029, is implemented by a network of excellence composed of 12 academic and non-academic organisations from 7 countries, placed under the coordination of the University of Pisa (IT).

Using AI-augmented robotics and sensors, AUTOMATA will create 3D models enriched with archaeometry data, providing a practical and cost-effective solution for digitisation. Robotic tools with newly developed AI methodologies will improve the digitisation process of visible and non-visible properties of archaeological finds, enhance the robustness and efficiency of 3D digitisation, improve surface appearance acquisition, and integrate 2D representations. This approach streamlines data acquisition, aided by human-AI collaboration, and, in turn, the collection of big, well-identified data will empower the development of AI models.

This cost-effective technology will democratise access to digitisation, benefiting the Cultural Heritage community at large, including public and private organisations dealing with culture, education, ICT, museums, creative companies and media, aid preservation methods and restorers’ work, and foster inclusive knowledge-sharing via a dedicated crowdsourcing platform.

Finally, the data collected by AUTOMATA will be seamlessly integrated into the European Collaborative Cloud for Cultural Heritage (ECCCH), a shared platform designed to facilitate collaboration among heritage professionals and researchers, and provide them with access to data, scientific resources, training, and advanced digital tools tailored to suit their needs. This platform is developed by [ECHOES](#) (European Cloud for Heritage OpEn Science), an overarching EU-funded project that brings together fragmented communities of the Cultural Heritage field into a new community around the Digital Commons.



## **Kicking-off AUTOMATA in Pisa**

The AUTOMATA project will be disclosed both to the academic and professional communities during a kick-off meeting organized by the University of Pisa on the 22<sup>nd</sup> October 2024.

During the event, the academic authorities of the University of Pisa and the partners of the AUTOMATA consortium will present the objectives and actions of the project, its various research focuses and the roles and responsibilities within the consortium.

Moreover, representatives from the European Commission will contextualize this project within Horizon Europe, the EU's main funding programme for research and innovation. A special focus will be made on the links between AUTOMATA and the European Collaborative Cloud for Cultural Heritage (ECCCH), managed by the EU-funded ECHOES project.

### AUTOMATA Kick-Off Meeting

22 October 2024, 14:00 - 19:00  
Gipsoteca di Arte Antica,  
Piazza San Paolo All'Orto 20, Pisa (Italy)

### Further info on AUTOMATA:

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