

NAVIGATING AI, AUTHENTICITY AND ETHICAL CHALLENGES IN HERITAGE COLLECTIONS – POST CONFERENCE IMPACT REPORT

Navigating AI, Authenticity and Ethical challenges in Heritage Collections

26 June 2026 in Brussels (also online)

SAVE THE DATE

Registration deadline: 22 June

Morning event: presentations, demonstrations

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Website page:

<https://eureka3d.eu/navigating-ai-authenticity-and-ethical-challenges-in-heritage-collections/>

Venue: imec – Pleinlaan 9 1050 Brussels

The interdisciplinary conference *Navigating AI, Authenticity and Ethical Challenges in Heritage Collections* explored the intersection of AI, authenticity, and ethics in heritage collections. The conference was organised in the context of the [Eureka3D-XR project](#), and experts from museums, tech sectors, and academia came together to share insights, expertise and case studies highlighting responsible innovation with the use of advanced technologies.

PART ONE: acting towards AI driven innovation and tackling pressing potential issues.

In this first part of the conference, experts in AI and its application within Cultural Heritage and beyond provided their valuable insights through presentations and keynote speeches. A more detailed breakdown of each presentation (and the related PowerPoint presentation) is available below.

The EUreka3D-XR project and what's next for AI/3D/XR, by Antonella Fresa (Photoconsortium)

Along with an introduction to the event, Photoconsortium Vice President Antonella Fresa delivered a presentation on their EUreka3D-XR project, and how it used new technologies to produce user experiences within the Cultural Heritage field. Along with these applications, however, questions about authenticity and the future applications of these technologies arose.

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The Power of Change: knowledge exchange and collaboration for innovative solutions in AI-driven 3D & Image Analysis, by Ines Vodopivec (AI4LAM, National Library of Norway, Stanford)

Dr. Ines Vodopivec provided a presentation on the organisation AI4LAM (Artificial Intelligence for Libraries, Archives & Museums), a community focused on advancing the use of Artificial Intelligence in Cultural Heritage Institutions and their study of the potential of AI by improving workflow to optimise digitisation, accessibility and reuse by creating strategies to successfully implement it.

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Authenticity and AI in cultural collections by Frederik Temmermans (imec/VUB)

With his presentation, Prof. Dr. Frederik Temmermans provided valuable insights regarding the issue of authenticity around AI Generated Content (AIGC), applying it specifically in the field of Cultural Heritage. The keynote speech closely analysed matters around Metadata and Paradata, AI-Driven Image Enhancements, demosaicing, rights attribution and other, more encompassing, concerns such as socio-economic impact, media manipulation and the importance of extracting and evaluating trust indicators.

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Managing the intellectual property of digital collections in the AI era, by Philippe Rixhon (Valunode OÜ)

The presentation of Philippe Rixhon provides valuable insights on the new challenges around Intellectual Property of digital collections in the era of AI: by using the EUreka3D 3D model use case of the Monastery of Panagia Chrysorrogiatissa, the presentation focuses on the EU directives and regulations regarding intellectual property rights and the glass-to-glass data pipeline, reserving a special focus specifically on 3D objects.

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PART TWO: case studies involving innovative use of AI at the service of Cultural Heritage.

During this second part of the conference, initiatives, associations and professionals that are engaged in the field of Cultural Heritage shared their experiences and their projects that are applying AI in different fields, such as Metadata compilation, facial recognition, 3D modeling, and more. Find out more about each case study:

AI for metadata enrichment of heritage collections at scale, by Axelle Vanmaele (meemoo, Flemish institute for archives)

In this presentation, Axelle Vanmaele (meemoo, Flemish institute for archives,) shared how meemoo has gradually embedded artificial intelligence in digital heritage workflows, from experiments with facial recognition to large-scale AI services for metadata enrichment. The talk explored the development of shared reference sets, the need for a human-in-the-loop and governance frameworks, highlighting the technical, legal and ethical challenges of applying AI at scale in the Cultural Heritage sector. It also reflected on the importance of collaboration with heritage institutions to ensure responsible, sustainable and reusable AI solutions.

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Gaussian splatting, by Saeed Mahmoudpour (imec)

Dr. Mahmoudpour delivered a highly technical presentation on 3D Gaussian splatting, explaining the process and steps to create a faithful 3D digitised object and highlighting the potential limits of digitisation. In a second part of the presentation it was explored how 3D Gaussian splatting can be applied to Cultural Heritage.

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AI in the service of CH, by Ismo Malinen (Museovirasto, Finnish Heritage Agency)

In this presentation, Chief Intendant Ismo Malinen explored a three year long project involving Finnish Museums that focuses on how Cultural Heritage can benefit from AI. The objectives of the project include the inclusion of AI competences and skills in Finnish CHI; the implementation of New AI tools, workflows and processes in collection work and the study of the impact of these elements on work around Cultural Heritage.

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AI-powered Knowledge Discovery in Digital Collections, by Nicolas Nadisic (KIK-IRPA and Ghent University)

Assistant professor and researcher Nicolas Nadisic presented the case of BALaT (Belgian Art Link and Tools), an online library containing more than 1 million

photos documenting Belgian Cultural Heritage, that was recently redesigned: beyond this update, the presentation explored the future possible applications of AI for knowledge discovery with advanced OCR, contextual translations, RAG, Metadata Enhancement and similar images search.

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Crystal clear? Challenges of accuracy and transparency in AI-assisted metadata workflows, by Eva Andersen, Annamaria Van Ingelgem (Ghent University Library – Boekentoren)

Dr. Eva Andersen and Annamaria Van Ingelgem delivered a presentation on a project that implements AI and Visual Language Models to automate different tasks (labelling, Metadata creation, artwork matching...) around digitised Cultural Heritage collection applied on tens of thousands glass plates while also adopting a human-in-the-loop approach and paying careful attention to transparency and trustfulness.

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The event successfully brought together experts from cultural heritage, academia and the technology sector to explore the opportunities and challenges of Artificial Intelligence in heritage collections. By combining strategic reflections on authenticity, intellectual property and responsible AI with concrete case studies and practical applications, the programme demonstrated that technological innovation and ethical considerations must go hand in hand.

The discussions throughout the day highlighted a growing awareness that the successful adoption of AI in cultural heritage extends beyond technical implementation. Participants particularly valued the opportunity to exchange experiences across disciplines and organisations, reflecting on themes such as transparency, trust, provenance and the role of human expertise in AI-assisted workflows. The event confirmed the importance of creating spaces where practitioners, researchers and technology developers can jointly explore emerging challenges and share good practices.

This conference was officially the last event organised within the scope of the EU co-founded project EUreka3D-XR – however, don't stop following us: all of the [project's resources](#) will remain available on our website and the [newsletter](#) will continue being active to give updates on possible further projects, initiatives and aggregation.