



MUSEUM BIG DATA WEEK 2026

10–14 November 2026 | Sofia, Bulgaria

AI for GLAMs • 3D Digitisation & Mapping • Museum Big Data 2026

Autumn School | Masterclass | International Conference

Date	Programme
10–11 November	Autumn School: AI for GLAMs
12 November	Masterclass: 3D Digitisation and 3D Mapping
12–14 November	Museum Big Data 2026 Conference

A five-day programme connecting practical experimentation, emerging technologies, research methods and responsible digital heritage practice.

Highlights of Museum Big Data 2026

Experiencing Heritage Differently: A 3D Mapping Demo

On 12 November, the conference opening will feature *Experiencing Heritage Differently: A 3D Mapping Demo*, the culmination of the masterclass From 3D Heritage to 3D Mapping. This interactive demonstration will show how 3D technologies can support cultural heritage research, documentation and interpretation, while also opening up new ways of engaging wider audiences with heritage places and objects.

The mapping will showcase selected highlights from the 3D Lab at IICT-BAS, strengthened through the FOCUS ERA Chair, demonstrating how advanced 3D technologies can support both research and public engagement. It will be the first 3D mapping experience in Bulgaria dedicated entirely to 3D digitisation of cultural heritage.

Keynote Talks

Prof. Dimitris Kotzinos (*Professor, Department of Computer Science, CY Cergy Paris University, France*)

A keynote bringing a computer science perspective to the challenges and opportunities of data-intensive cultural heritage research and bringing to the conference the most recent developments at the ECCCH.

Margarita Dorovska (*Director, Christo and Jeanne-Claude Center, Gabrovo, Bulgaria*)

Digitised Museum Collections – Use for Researchers, Museum Staff and General Audience

Exploring how digitised museum collections can create value across research, professional practice and public engagement.

Prof. Erik Champion (*University of South Australia, Australia*)

Immersive Visualisation and the Emergence of Collaborative XR in the Museum Sector

A keynote addressing emerging directions in digital cultural heritage and the ways new technologies are reshaping research and interpretation.

AUTUMN SCHOOL: AI FOR GLAMs

10–11 November 2026 | For PhD students, early-career researchers and young professionals

Registration by 12 October 2026 on <https://tinyurl.com/AI4GLAM>.

Tuesday, 10 November 2026

The Use of AI in the Archives

Erik Lenas, *Lead Data Scientist, Swedish National Archives, Stockholm, Sweden*

The Use of Smart Glasses in Cataloguing

Hannes Lowagie, *Royal Library of Belgium*
Recent recipient of the AI4GLAM Innovation Award for this work (September 2026)

Experimentation with AI in the Matenadaran

Ara Gasparian, *Digitisation Department, Matenadaran, Armenia*

Overview of CLADA-bg and its Knowledge Graphs Experimentation

Kiril Simov, *Institute of Information and Communication Technologies, Bulgarian Academy of Sciences*

AI meets Museum CMS: CHRONOS for Smart Documentation and Collection Management

Avgoustinos Avgousti, *The Cyprus Institute, Cyprus*

Wednesday, 11 November 2026

Speculating Together: Human-centred AI for Intangible Heritage

Cassandra Kist and Catherine Chavula, *University of Strathclyde, UK*

Open Science

Elena Giglia, *University of Torino, Italy*

Wrapping Up – What Happens Next?

Phyllis Posy, *PosyGlobal, Israel*

Workshop on Academic Publishing

MDPI

3D DIGITISATION AND 3D MAPPING MASTERCLASS

Thursday, 12 November 2026

To join the event, apply here: <https://tinyurl.com/3dmapclass>

- **Introduction:** Assoc. Prof. Ines Vodopivec, Prof. Ivan Georgiev and Assoc. Prof. Milena Dobрева

Setting the scene: Advancing Visual Heritage Access with AI: AI4LAM Use Cases for Art, Audiovisual, and Multimedia Collections

Dr Ines Vodopivec, Secretary General AI4LAM (National Library of Norway, Stanford)

AI4LAM is an international community advancing responsible and practical applications of artificial intelligence across libraries, archives, and museums. Its collaborative Working Groups support institutions in developing shared methodologies, tools, and expertise for AI-enhanced access to cultural heritage collections. Recent use cases demonstrate the transformative potential of these approaches: for example, Stanford University Libraries and the Bibliothèque nationale de France have implemented AI-driven pictorial collection explorers that enable enriched discovery, visual similarity search, and new modes of engagement with large-scale image corpora. Building on such initiatives, AI4LAM has established a new 3D and Image Analysis Working Group, focusing on AI-supported processing of 2D and 3D cultural heritage materials, including segmentation, classification, and advanced rendering workflows.

AI4LAM's Speech-to-Text Working Group further expands access to audiovisual heritage by improving transcription workflows, evaluating emerging ASR technologies, and supporting institutions in processing extensive AV collections. Building on this momentum, a new Working Group dedicated to audiovisual materials is currently also being established, focusing on AI-supported analysis, enrichment, and access to complex AV holdings. Together, these efforts strengthen the capacity of libraries to integrate cutting-edge AI techniques, expand access to complex visual collections, and foster a shared, community-driven roadmap for innovation in the cultural heritage sector.

Short bio: Associate Professor Dr. Ines Vodopivec is deeply committed to advancing digitization theory and practice within heritage institutions on an international scale. Her notable roles include serving as Deputy Director of the National and University Library of Slovenia, and Vice Dean at Nova University in Ljubljana, being a dedicated member of the UNESCO Memory of the World National Committee, and participating as a member of the IFLA Digital Humanities – Digital Scholarship Committee.

More recently, she assumed the role of Secretary General of AI4LAM, working with the National Library of Norway and Stanford University Library, USA, further solidifying her leadership and influence in the fields of digital heritage and innovative methodologies. She is also a Management Board Member of the Europeana Network Association.

- **Overview of Trends and Recent Experiences in 3D digitisation work**

AI-Driven Analysis and Segmentation of Figural Scenes: From 3D Geometry to Graffiti Detection in Frescoes and the Unwrapping of Archaeological Vessels for Reliable Motif Recognition

Boštjan Gabrovšek, Vesna Pungercar (Rudolfovo - Science and Technology Centre Novo Mesto, Slovenia)

Experimentation in 3D Digitisation in IICT-BAS

Dr Nikolay Petkov (IICT-BAS)

Immersive Visualisation

Prof. Erik Champion (Adelaide University)

- **Introduction to 3D mapping:** main practical and methodological challenges (3DMapping)
- **From 3D Digitisation to 3D Mapping** - Dr Nikolay Petkov (IICT-BAS)
- **Discussion of future potential:** Research, documentation, reuse and emerging applications of 3D digitisation and mapping.

Evening: 3D Mapping Demonstration

MUSEUM BIG DATA 2026

Draft Conference Programme

Thursday 12 to Saturday 14 November 2026 | Sofia, Bulgaria

THURSDAY 12 NOVEMBER 2026

Opening day and evening | Plenary room

Time	Programme	
09:00–09:30	Registration and welcome coffee	
09:30–10:00	Conference opening and welcome addresses	
10:00–11:00	Keynote Lecture 1 — Dimitris Kotzinos <i>Professor, Department of Computer Science, CY Cergy Paris University</i>	
11:00–11:30	COFFEE BREAK	
11:30–12:30	Joint session with the 3D and 3D Mapping Masterclass	
12:30–13:30	LUNCH BREAK	
13:30–15:00	Session 1: Research-ready collections and semantic quality Chair Georgios Papaioannou	Session 2: Museum education, teachers and historical inquiry Chair: Alexandra Angeletaki
15:00–15:30	COFFEE BREAK	
15:30–16:30	Session 3: FAIR data provenance and digital documentation Chair: Elena Giglia	Session 4: Visitor intelligence, engagement and institutional reach Chair: Ivan Lambov
16:30–17:00	COMFORT BREAK	
17:00–19:00	WELCOME CEREMONY: Launch of 3D collection to Europeana and 3D Mapping Welcome addresses Presentation of 3D Mapping and 3D Collection for Europeana Reception	

FRIDAY 13 NOVEMBER 2026

Time	Room A	
09:00–10:00	Keynote Lecture 2 — Margarita Dorovska <i>Director, Christo and Jeanne-Claude Center</i> Digitised Museum Collections – Use for Researchers, Museum Staff and General Audience	
10:00–10:30	COFFEE BREAK	
10:30–11:45	Session 5: Knowledge graphs, digital twins and evidence infrastructures Chair: Nevzat Özel	
11:45–12:00	COMFORT BREAK	
12:00–13:00	Session 6: Responsible, explainable and legally aware AI Chair Ines Vodopivec	
13:00–14:00	LUNCH BREAK	

Time	Room A	
14:00–15:30	Session 7: Immersive interaction, AI restoration and digital experience Chair: Mahendra Mahey	
15:30–16:00	COFFEE BREAK	
16:00–17:15	Session 8: Participation, oral knowledge and community memory Chair: Phyllis Posy	
17:15–18:00	POSTER DEMONSTRATION AND NETWORKING	
Evening	CONFERENCE DINNER	

SATURDAY 14 NOVEMBER 2026

Time	Room A	
09:00–10:00	Keynote Lecture 3 — Erik Champion Immersive Visualisation and the Emergence of Collaborative XR in the Museum Sector <i>University of Adelaide</i>	
10:00–11:00	Session 9: Digital research practice, specialist museums and virtual worlds Chair: Ivan Georgiev	
11:00–11:30	COFFEE BREAK	
11:30–12:45	Session 10: Governance, accountability, sustainability and cultural value Chair: Cassandra Kist	
12:45–13:30	Closing panel — Museum Big Data after 2026; closing	
13:30 onwards	OPTIONAL LIGHT LUNCH / DEPARTURE	

Legend: 🌐 - online presentations

Session 1 | Thursday, 12 November 2026 | 13:30–15:00 | Research-ready collections and semantic quality

Chair: Georgios Papaioannou

Time	Paper / activity	Author(s) / format
13:30–13:45	From Museum Documentation to Research-Ready Knowledge: An Information Management Framework for Open, Interoperable and Reusable Collection Data	Nevzat Özel, Semanur Öztemiz (Turkey)
13:45–14:00	Linting Museum Metadata for Machine Reuse: A Semantics-Preserving Audit Method for Open Collection Records	Athanasios Tsipis (Greece)
14:00–14:15	From Excavation Records to AI-Ready Cultural Heritage Data: A Case Study from the Quesna Necropolis	Ahmed Elbadwy (Egypt)
14:15–14:30	Documenting Artists' Archives as an Integral Component of Artists' Studio Documentation: The Case of Valentinos Charalambous	Andriana Nikolaidou (Cyprus)
14:30–14:45	Bulgarian Heritage in the Collection of the Museum of European Cultures in Berlin: Introducing Gustav-Adolf Küppers, a German Researcher of the Crafts of Troyan	Desislava Vutova, Daniela Bankova, Nina Dimitrova (Bulgaria)
14:45–15:00 🌐	Beyond Digitalisation: Big Data, Memory and Representation Challenges in Afro-Diasporic Museums – Reflections from Museu Afro Brasil Emanuel Araújo.	Blondynne Poldor, Wedsley Florvil (Brazil)

Session 2 | Thursday, 12 November 2026 | 13:30–15:00 | Museum education, teachers and historical inquiry

Chair: Alexandra Angeletaki

Time	Paper / activity	Author(s) / format
13:30–13:45	From School Visits to Data-Rich Museum Ecosystems: Teachers as Pedagogical Human-in-the-Loop Mediators of AI and Digital Cultural Heritage	Ourania Peponi (Greece)
13:45–14:00 🌐	Reinterpreting the Cretan Crisis of 1889 through Historical Thinking and Digital Museum Collections.	Thomas Papakonstantinou (Greece)
14:00–14:15	Data-Driven Approaches in Museum Education: A Short Literature Review	Konstantina Maidatsi, (Greece)
14:15–14:30	Heritage Education and Teacher Autonomy: Semantic Reuse of Digital Collections for Teaching Material Development	Paula Chagas, Alison Filgueiras, Juliana Braga, Cecilia Leite, Gabriella Bispo, Isaque Dias, Leonardo Brito, Myllena Sousa (Brazil), Clément Philippo (Brazil / France)
14:30–14:45	Digital catalogue of Bulgarian folk dances preserved through the 'Taratanci' methodology	Iva Gadzheva (Bulgaria)
14:45–15:00	Digital Cultural Collections, Technology and Heritage Education: Research and Innovation Experiences in Memory Institutions in Goiás State/Brazil	Paula Chagas, Alison Filgueiras, Juliana Braga (Brazil)

Session 3 | Thursday, 12 November 2026 | 15:30–16:30 | FAIR data provenance and digital documentation

Chair: Elena Giglia

Time	Paper / activity	Author(s) / format
15:30–15:45 	Museums' Digital Provenance Data and Metadata Enhancing Interoperability Data Governance and Legal Protection against Illicit Cultural Heritage Trafficking	Aikaterini Mikalef (Greece)
15:45–16:00	Findability Is Not Evenly Distributed: Coverage of contemporary artists in Wikidata across twenty national contexts	Victor Murari (Brazil)
16:00–16:15	High-Resolution 3D Documentation of Religious Heritage Objects with a FARO Portable Laser-Scanning Arm: A Case Study from Saint Nicholas Church, Dolo, Pogoni	Panagoula Kopelou, Anastasia Katsoulou, Dimitrios Anastasiou, Georgios Papaioannou, Vassilios Pagounis (Greece)
16:15–16:30	Making Architectural Heritage FAIR: a Standardised Framework for Metadata Structuring	Vladimir Petrov (Bulgaria)

Session 4 | Thursday, 12 November 2026 | 15:30–16:30 | Visitor intelligence, engagement and institutional reach

Chair: Ivan Lambov

Time	Paper / activity	Author(s) / format	
15:30–15:45 	Data into Power: Leveraging Computational Mapping and Machine Learning for GLAM Soft Power	Natalia Grincheva (Singapore)	ONL
15:45–16:00 	Visitor Experience, Audience Research, and Big Data Generation through a Proposed Museum Educational Programme	Kalliopi Dimitriou (U.K.)	ONL
16:00–16:15	Museum visitor studies through Big Data: Methodological insights from the FluSeUM Project	Anna Micheli, Eleni (Lena) Sfyridou (Greece)	BG
16:15–16:30 	From Artist Reputation to Audience Attraction: A Data-Informed S–O–R Framework for Young Audiences in Digital Cultural Heritage	Mohammad Amin Koulivand Salouki, Muhammad Piri, Hossein Hajibabaei (Iran)	ONL

Session 5 | Friday, 13 November 2026 | 10:30–11:45 | Knowledge graphs, digital twins and evidence infrastructures

Chair: Nevzat Özel

Time	Paper / activity	Author(s) / format
10:30–10:45 	From Object to MetaObject: Crossing the Digital Twin Threshold in Cultural Heritage	Charis Avlonitou, Xenofon Giannakis (Greece)
10:45–11:00 	From Philatelic Objects to a Cultural Heritage Knowledge Graph: A Museum Big Data Framework for the History of Education in Greece	Alexia Orfanou (Greece)
11:00–11:15	Dynamic Museum Knowledge Graphs: A Semantic and Temporal Representation of Evolving Museums and Visitor Trajectories	Alaa Eddine Siouane (Algeria), Claudia Marinica, Fabien Picarougne, Fabrice Guillet (France), Georgios

Time	Paper / activity	Author(s) / format
		Papaioannou (Greece)
11:15–11:30	Empirical Validation of a Governance-Aware Evidence Infrastructure for Provenance and Traceability: Prototype Demonstration and Multi-Stakeholder Expert Evaluation	Aleksandar Panayotov, Ivan Lambov, Mariana Atanasova (Bulgaria)
11:30–11:45	Round-tripping Streets and Monuments: Synchronising the Heritage Register with Wikidata and OpenStreetMap	Nikola Tulechki (Bulgaria)

Session 6 | Friday, 13 November 2026 | 12:00–13:00 | Responsible, explainable and legally aware AI

Chair: Ines Vodopivec

Time	Paper / activity	Author(s) / format
12:00–12:15 	Human Compatibility in the Age of AI: A Framework for Museum Innovation	Ignacio Zamora Sanz (Spain / Australia)
12:15–12:30	29. From Data to Knowledge: Designing a Human-Centred Artificial Intelligence (AI) for Cultural Heritage	Avgoustinos Avgoustis, Athanasios Koutoupas (Cyprus), Georgios Papaioannou (Greece), Nikolas Bakirtzis (Cyprus)
12:30–12:45	40. Beyond Sentiment Scores: Responsible Multilingual AI for Interpreting Museum Visitor Feedback	George Mikros (Qatar), Mustafa Jarrar (Palestine), Alexei Sisulu Abrahams (Canada), Eleni Polymenopoulou (Qatar), Georgios Papaioannou (Greece)
12:45–13:00	23. Artificial Intelligence in Museums: Compliance Issues Regarding Personal Data	Antonia Pediaditaki (Greece)

Session 7 | Friday, 13 November 2026 | 14:00–15:30 | Immersive interaction, AI restoration and digital experience

Chair: Mahendra Mahey

Time	Paper / activity	Author(s) / format
14:00–14:15	A Metadata Index for Matenadaran's Four-Million-Page Manuscript Corpus	Ara Gasparyan (Armenia)
14:15–14:30	Reanimating Static Heritage: Enhancing Mural Comprehension and Visitor Engagement through AI-Driven Multimodal Interaction	Dan Zhou, Xin Yu, Qiang Zhou (China)
14:30–14:45 	Designing Inclusive XR Cultural Heritage Experiences for Older Adults: Insights from the FIREFLY Project	Stella Sylaiou, Angeliki Antoniou, Kyriaki Kostoglou (Greece), Fotis Liarokapis (Cyprus), Georgios Pavlidis, Konstantinos Evangelidis (Greece)
14:45–15:00	An Open Digital Replica for Bulgarian Linguistic Heritage: A Framework and Pilot Study of Old Bulgarian Text Restoration	Ruslana Margova (Bulgaria)

Time	Paper / activity	Author(s) / format
15:00–15:15 	Big Data and AI-Driven Digital Preservation of Cultural Heritage: The Tanyuan Program's Museum-Centered Cooperation Model from China	Yongqiang Wang, Yaoti Chang, Wei Li (China)
15:15–15:30	Virtual Reconstruction of a Traditional Costume through Reverse Engineering: From 3D Scan to a Construction-Based Digital Model	Vessela Statkova, Merian Bashova (Bulgaria)

Session 8 | Friday, 13 November 2026 | 16:00–17:15 | Participation, oral knowledge and community memory

Chair: Phyllis Posy

Time	Paper / activity	Author(s) / format
16:00–16:15	Co-creating Urban Memory: Community Participation in Documenting 20th-Century Entertainment in Lefkada	Ioanna Livitisanou (Greece)
16:15–16:30	Bridging the Silent Gap: Human Mediation vs Data Accessibility in Non-Digital Museums Towards a Theoretical Framework: The Case of "Museums Chlomos: Nona's House - Olive Mill"	Alexandra Andrianou (Greece)
16:30–16:45 	A Museum Without Labels: Ethnographic Collaboration and Community Participation at the Quilombo Ipiranga Museum, Brazil	Osvaldo Santos Falcão (Brazil)
16:45–17:00 	Mobile Museums as a Tool for Expanding Cultural Access: Lessons Learned from a Rural Outreach Initiative in West Azerbaijan, Iran	Farzaneh Valipour (Iran)
17:00–17:15	From Textile Object to Digital Heritage: A Community-Based Documentation Model for Kyrgyz Tush Kiyiz	Nazira Usenova (Kyrgyzstan)

Session 9 | Saturday, 14 November 2026 | 10:00–11:00 | Digital research practice, specialist museums and virtual worlds

Chair: Ivan Georgiev

Time	Paper / activity	Author(s) / format
10:00–10:15	www.artinvideogames.com: Building an active research website as a method in a PhD	Ignacio Zamora Sanz (Spain / Australia)
10:15–10:30	The multidimensional role of football museums in Europe: Sample selection and methodological framework of an ongoing study	Alexandros Amarantidis, Georgios Papaioannou (Greece)
10:30–10:45	Libraries in Museums in Popular Videogames: Role(s), Function(s) and Impact.	Aristoteles Georgios Sakellariou (Malaysia), Arietta Papaioannou (Greece)
10:45–11:00	When Big Data Meets Small, Living Corpora: Testing Museum-Data Frameworks Against Intangible Directorial Process	Marius-Alexandru Teodorescu (Romania)

Session 10 | Saturday, 14 November 2026 | 11:30–12:45 | Governance, accountability, sustainability and cultural value

Chair: Cassandra Kist

Time	Paper / activity	Author(s) / format
11:30–11:45 	From Ethical Principles to Verifiable Accountability: Blockchain and NFTs in Museum Governance	Charis Avlonitou (Greece)
11:45–12:00	Aligning Digital Innovation with Institutional Sustainability: A Strategic Framework for Responsible AI and Big Data in Museums	Evangelia Pelentridou (Greece)
12:00–12:15	Multimodal Accessibility in the Museum Space: An Audiovisual Translation Perspective on Visitors	Haitem Nacer (Algeria), Amer Al-Adwan (Jordan)
12:15–12:30	AI-Supported Assessment of Non-Economic Cultural Value in Museums: A Human-Centred Conceptual Framework	Evangelia Ayfanti, Alexandra Bousia (Greece)
12:30–12:45 	Narrating Islamic Art for the World: A Socio-Narrative Analysis of Framing Strategies in the Bilingual Digital Presence of Qatar's Museum of Islamic Art	Mahmoud Alhirthani (Qatar)
12:45 – 13:00	Rebooting Creative Higher Education for the Age of Generative AI: A Multi-Stakeholder Study of Skills, Ethics and Big-Data Readiness	Anne Hertzog (France), Paula Cardoso (Portugal), Michele Angelaccio (Italy), Theodoros Giannopoulos (Cyprus)

Closing panel: Museum Big Data after 2026: Research responsibility and practice: What should museums, researchers and technologists do next to make museum data genuinely reusable, responsible, inclusive and sustainable?

Chairs: Georgios Papaioannou & Milena Dobрева

Farewell and Lunch