



## CALL4PAPER

You are kindly invited to join the 4<sup>th</sup> edition of DigitalHeritage World Congress and Expo (DH25), organised in Siena (Italy), from September 8 to 13, 2025, by submitting original contributions applied to the various areas within the Digital Cultural Heritage domain

[www.digitalheritage2025.unisi.it](http://www.digitalheritage2025.unisi.it) - Digital Heritage 2025 Siena Italy - [digitalheritage@unisi.it](mailto:digitalheritage@unisi.it)

### INTRODUCTION

DigitalHeritage (DH) World Congress & Expo is a widely recognized event dedicated to the advancement of theory and practice within digital cultural heritage. DH 4<sup>th</sup> edition brings together leading international scientific organisations, initiatives and events, all in one venue with a prestigious joint publication. A groundbreaking public exhibition of cutting edge digital heritage projects will also be set up. Following the successful format of the previous editions, the conference will have a single call for papers and a coordinated scientific review process.

### LOCATION

In 2025 the Congress is organised in Siena (Italy), one of the most important cities in mediaeval Europe. The whole city, with its iconic Piazza del Campo, was devised as a work of art that blends into the surrounding landscape.

### PROGRAM

DH25 opens on September the 9th, 2025, anticipated by a full day of Tutorials, Workshops, Policy Roundtables and Projects meetings. On the 8th, DH Expo will be officially opened for participants and citizens. The closing ceremony and social dinner are

expected to take place on the 12, while social trips and tuscany wine tasting on the 13th.

### CALL FOR PAPERS

We are seeking original, innovative and previously unpublished contributions in theoretical or applied Digital Heritage domains. All papers will have a blind peer review by the International Programme Committee (IPC). The IPC seeks for every submission at least one “digital” and one “heritage” reviewer to ensure a rich diversity of accepted works. All submissions will be reviewed for originality, significance, clarity, impact, and soundness. Author registration and contributions submissions are accepted SOLELY through the official conference platform [OpenReview](https://openreview.net), accessible starting from February the 10th, 2025. Papers can be submitted based on the 6 conference tracks, the Special Sessions and the co-located event Web3D. It is possible to choose the type of submission among: full papers, short papers, posters, tutorials, workshops and panels.

### PUBLICATION

Conference Proceedings will be published in Open Access with Eurographics (EG) Publisher and will be available in the EG Digital Library, indexed by Scopus and Web of Science, while

a co-publication agreement is currently under negotiation with IEEE. Web3D conference contributions will be published in ACM.

*Journal Special Issues:* a selection of papers submitted to the conference will be invited for an extended publication in leading journals (ACM JOCCH, Elsevier JCH, MDPI Heritage, Indiana Univ. Press “Studies in Digital Heritage” etc.).

*Exhibition Catalogue:* exhibitors will be invited to submit their work to a special issue of Elsevier DAACH.

### TYPES OF CONTRIBUTION

PAPERS (*templates are provided*):

- Full (10-pages incl. bibliography) for high standing scientific results and longer oral communication at the conference;
- Short (4-pages incl. bibliography) for ongoing research and shorter oral communication at the conference;
- Poster (2-pages incl. bibliography) for ongoing or recently completed work.

SPECIAL SESSIONS (*templates are provided*):

- Workshop (2-pages incl. bibliography) forum for researchers and practitioners to discuss and exchange positions on current and emergent topics;
- Tutorial (2-pages incl. bibliography) presentation of technological solutions and methods for students and professionals;
- Panel (2-pages incl. bibliography) high level discussion with experts on key challenges.

EXPO\* (*template is provided*):

- Exhibition proposal (form on line): a separate “[call4expo](#)” is launched including all specific details.

### SUBMISSION

All contributions must be original, anonymized, and not simultaneously submitted to another journal or conference. Authors are requested to submit their work by means of the conference submission platform. Submissions will be rejected without review if it is found that: 1. The submission violates the [EG Policy and Procedures on Plagiarism](#). 2. Electronic files have been created using AI. 3. The paper contains material for which the submitters have not secured the necessary copyrights.

### AWARDS

DH25 will honour best works by different awards:

- *Best paper award:* best papers will receive an award and invitation to submit to high impact scientific journals for high standing publication.
- *Best exhibition award:* Best applications and installations will be selected in different categories including interactive and non-interactive applications, digital art installation and emerging technologies demo.

IMPORTANT DATES	Deadline	Notification	Camera Ready
Abstract* (400 words)	15.03.2025		
Workshops**/Panel/Tutorials (2 pp)	15.04.2025	15.06.2025	01.07.2025
Full Papers (10 pp)	15.04.2025	15.06.2025	01.07.2025
Short Papers (4 pp)	15.04.2025	15.06.2025	01.07.2025
Poster (2 pp)	15.05.2025	15.06.2025	01.07.2025

\* Abstracts are not going to be reviewed but are required to organize the reviewing process.

## TRACKS, CO-LOCATED EVENTS AND SPECIAL SESSIONS

### 1) Documentation, Preservation, Monitoring

and Restoration track (F. Remondino - FBK, V. Abergel - CNRS,

C. Miliani - CNR ISPC):

Heritage impact assessment  
Inventory for heritage management  
Cultural heritage and archives  
Heritage management planning  
Endangered heritage  
Natural risk management  
Climate change mitigation  
Long term archiving/storage  
Intangible heritage  
Rehabilitation of historical buildings  
Digital publishing and Philology  
Digital Technologies for Restoration&Monitoring

### 2) Policy, Standards, Ethics and Education track (M. Klein - 7Reasons, A. Chrysanthi - Univ. of the Aegean):

Ethical use of AI technologies  
Requirements and policies  
SDG for heritage  
Cultural tourism  
Education and training  
Sociology and User studies  
Neuroscience and cognitive psychology in DH  
Sustainability  
Metadata  
Archives accessibility and reproduction rights  
Public use of History digital society  
Heritage & tourism sustainability  
Citizen science for heritage  
Cultural heritage and local identity

### 3) Infrastructures, Dataspace and international projects track (D. Kotzinos - ECHOES, A. Guillem

ERIHS & B. Fanini - H2IOSC)

Collaborative cloud for Cultural Heritage  
Connecting infrastructures  
Best practices  
Digital transformation  
Digital Archives and Digital Libraries  
Digital accessibility  
Heritage cybersecurity  
Blockchain and NFT

### 4) Acquisition and Digitization track (P. Santos - GCH & M.Hoffmann -National Library CH, S. Campana-Univ. Siena)

Photogrammetry and Computer Vision  
Laser scanning and active sensors  
AI-based methods  
Multimodal data  
Remote sensing  
Historical data processing

Materials and colours

Reflectance modelling

Neural Rendering Techniques (NeRF)

Generative AI for Cultural Heritage and Design

Massive digitization

### 5) Analysis and Interpretation track (J.Barcelo -Univ. Barcelona & M. Spagnuolo - CNR IMATI)

Data fusion

Multi-temporal data analysis

Multi-modal analysis

Semantic enrichment

Point cloud segmentation and classification

Object detection

finite element modelling

Scan2BIM

GIS and spatial analyses

BIM and Digital Twin for Cultural Heritage

Ontologies

Diagnostic analysis

### 6) Visualisation and Interaction track (K. Rodriguez Echavarria - GCH & L. De Paolis - XRSalento)

Web-based interactive solutions

Virtual, Augmented, Mixed, Extended Reality

Hybrid Experiences, Hybrid Museums

Interfaces

Serious Games, Applied Games and Gamification

Virtual technologies for museums, Virtual Museums

Advanced image-based rendering techniques

Design UX / UI

Haptic and HCI for heritage

Simulations

Digital born art

Cultural creativity

### 7) ACM web3D (Chairs: Nicholas Polys - Virginia Tech, Anita Havele - Executive Director, Web3D)

The 30th International ACM Conference on 3D Web Technology (Web3D 2025) is a major annual event for the 3D Web community. Sponsored by ACM SIGGRAPH, in cooperation with Web3D Consortium and supported by Eurographics. This year's conference will be co-located with Digital Heritage 2025, a premier international event that unites multiple heritage domains and conferences under one platform. As the leading global event on digital technology for documenting, conserving, and sharing heritage – from landscapes and monuments to museums, collections, and intangible traditions. The purpose of the Conference is to study and share the principles of the latest advancements in interactive 3D technologies, including Digital Heritage. The conference will bring together experts

from around the world to discuss the latest research, development, and practices related to these technologies

### 8) Special Sessions:

- Digital technologies for Colour Analysis, Reconstruction and Visualisation (Organised by PERCEIVE - Chairs Catlin Langford and Donata Magrini)

How to exhibit the sensitive cultural heritage and materials and which are the possibilities of digital interventions? The special session will consider the idea of 'exhibiting the unexhibitable'. Based on the European project PERCEIVE\*'s results, the session chairs invite researchers and professionals interested in coloured collections to submit original work that could nurture the discussion of cultural objects which no longer feature their original colour, and objects which cannot be exhibited because of their light sensitivity and tendency for colours to fade

\*[www.perceive-horizon.eu](http://www.perceive-horizon.eu)

- Computer Applications in Archaeology (Organised by CAA) Chairs: L. Fischer, J. Barron Glover)
- Collaborative cloud for Cultural Heritage (Organised by ECHOES) Chairs: E. Demetrescu and S. Hermon
- Digital Technologies for CHANGES (Organised by CHANGES foundation) Chairs: S. Peroni, I. Heibi (Univ.Bologna)
- H2IOSC project development and results (Organised by H2IOSC) Chair: A. Buccero and R. Colella (CNR)

In the framework of DH25, the DHILAB of ISPC-CNR in Lecce will organize a special session dedicated to the developments and research results achieved on the Italian PNRR H2IOSC project, which focuses on the creation of a strategic cluster of four digital infrastructures for humanities and cultural heritage in Italy. The session aims to host at least 8 invited speakers, who will present the work carried out by their respective research teams within the H2IOSC PNRR project. The session will be structured in two parts, with a coffee break in between, and will last no more than half a day. Each speaker will have 15 minutes for the presentation, followed by a 5-minute Q&A. The session will be moderated by two session chairs, who will facilitate the discussions and ensure a smooth flow of presentations.

- Heritage Under Fire: Digital and Cultural Challenges in Conflict Zones (Organised by From Space to Place Initiative

- Chair: S. Campana - University of Siena, M. Nebbia - University College London)

- Phygital Worlds and eXtended Reality in Cultural Heritage (Organised by XR Salento - Chair: L. T. De Paolis - Univ. Salento)

The term "phygital" refers to the blending of the physical and digital worlds. It describes how digital technology is increasingly integrated into physical spaces and experiences, transforming objects and environments by providing new and personalized ways to engage with them. Extended reality (XR) is revolutionizing how the public experiences and interacts with cultural environments, as well as how researchers' study and preserve tangible and intangible heritage. This special session aims to bring together XR experts to explore the "phygital" world and the potential new frontiers of virtual cultural heritage. The special session will be a satellite event of the XR Salento 2025 conference, which will take place in Otranto (Lecce, Italy) from June 17 to 20, 2025

- Play, Learn, Explore: Cultural journeys of hidden treasures through Serious Games (Organised by the Serious Games Society; Chairs: C.E. Catalano (CNR IMATI, K. Körner - University of Tübingen)

Serious Games (SGs) have become a valid tool for learning and training in the last few years. Thanks to methodologies and technologies dedicated to the design, authoring, configuration/adaptation and use of SGs, it is possible to design and personalise contents and presentation modalities to the different user needs and preferences. This session aims to explore the maturity and potential of serious games in communicating and promoting cultural experiences. The focus will be on the relationship between cultural sites or objects and visitors, soliciting particularly games that encourage physical visits and foster interaction between art and people, potentially mediated by technology. Special attention will be given to small and lesser-known cultural venues that have limited access to such technologies and interactive experiences.

**COMMITTEE:** **Congress Chairs:** S. Campana (Univ. Siena), D. Ferdani (CNR ISPC), H. Graf (Fraunhofer IGD), S. Pescarin (CNR ISPC), F. Remondino (FBK), G. Guidi (Indiana Univ.) - **Publication Chair and Assistant:** G. Guidi, Z. Hegarty (Indiana Univ.) - **Scientific Chairs:** R. Scopigno (CNR ISTI), L. de Luca (CNRS), M. Roussou (Univ. of Athens); **Expo Chairs:** S. Kenderdine (EPFL), D. Ferdani - **Poster Chairs:** H. Kutlu (Fraunhofer IGD) & S. Rizvic (Univ. Sarajevo); **Social Media Chair** L. Travaglini. **DigitalHeritage 2025 Committee:** Violette Abergel (CNRS), Costanza Miliani (CNR ISPC), Michael Klein (7Reasons), Angeliki Chrysanthi (Univ. of the Aegean), Dimitri

Kotzinos (ECHOES - Cergy Paris University), Anais Guillem (ERIHS - CNRS MAP), Bruno Fanini (H2IOSC - CNR ISPC), Pedro Santos (GCH - Fraunhofer), Martina Hoffmann (National Library CH), Michela Spagnuolo (GCH-CNR IMATI), Juan Barcelo (Univ. Barcelona), Martijn van Leusen (Univ. of Groningen), Karina Rodriguez Echavarría (GCH - Univ. of Brighton), Lucio De Paolis (XRsalento - Univ. Salento), Nicholas Polys (web3D - Virginia Tech), Anita Havele (Executive Director, Web3D Consortium), Pascal Lievaux (French Min. C.H.), Catlin Langford (PERCEIVE - V&A), Donata Magrini (PERCEIVE CNR), Emanuel Demetrescu (ECHOES - CNR), Sorin Hermon (ECHOES - Cyprus Institute), Alberto Buccero (H2IOSC - CNR ISPC), Riccardo Colella (H2IOSC - CNR ISPC), Marco Nebbia (From Space to Place UCL), Lisa Fischer (CAA), Jeffrey Barron Glover (CAA), Silvio Peroni (CHANGES - Univ. Bologna), Ivan Heibi (CHANGES - Univ. Bologna), Chiara Eva Catalano (Gala - CNR IMATI), Francesco Bellotti (Gala - SAGA), Kevin Körner (Gala - University of Tübingen), A. Palombini (Archeovirtual), M. Forte (From Space2Place), J. Lerma (Arqueologica 2.0), A. Guillem (ERIHS), H.Hrasnika (NEM initiative)

**\*\*WORKSHOP:** a structured session organised around a topic, including practical demonstrations or hands on activities that may also involve the attendees; the topic is discussed by a sequence of speeches, guided by a workshop moderator (chair), who keeps the time of the different presentations and manages the Q&A moments. The workshop can typically last 2 or 4 hours, in accordance with the number of speakers and complexity of the topic/demonstrations. The workshop proposal is submitted as a 2-page manuscript, published in EG DL. This paper should outline the topic and the different aspects that will be demonstrated/discussed; it includes the names of the participants. It follows the same submission process as a regular paper, adopting the same template as a standard 2-page article. It should contain: The title and theme of the workshop, The names and affiliations of the speakers, A brief introduction explaining the relevance of the topic, A summary of the key discussion points.

The authors are listed as follow: the moderator as the first author, followed by all participants in alphabetical order (ensuring they receive proper visibility in the proceedings as co-authors)

**PANEL:** a structured discussion, guided by a panel moderator (chair), who steers the conversation in certain directions with targeted questions based on a script agreed upon with the participants, in advance but without detailed pre-prepared responses. The panel proposal is submitted as a 2-page manuscript, published in EG DL. This paper should outline the scope of the panel discussion, include the names of the participants, and describe the type of contribution each of them will bring to the discussion based on their background. It follows the same submission process as a regular paper, adopting the same template as a standard 2-page article. It should contain: The title and theme of the panel, The names and affiliations of the speakers, A brief introduction explaining the relevance of the topic, A summary of the key discussion points and the different perspectives expected from the participants.

The authors listed as follow: the moderator as the first author, followed by all participants in alphabetical order (ensuring they receive proper visibility in the proceedings as co-authors)

**TUTORIAL:** a structured hands-on session, moderated by a chair and led by experts in the field, where a max number of registered attendees can assist to the presentation of a methodology or technology relevant to the conference's theme; it may include speeches, demonstrations, interactive exercises, and discussions; it's goal is to educate researchers, practitioners, and students on emerging trends, advanced techniques, or foundational concepts. The tutorial proposal is submitted as a 2-page manuscript, published in EG DL. This paper should outline the topic and the different aspects that will be demonstrated/discussed; it includes the names of the participants. It follows the same submission process as a regular paper, adopting the same template as a standard 2-page article. It should contain: The title of the tutorial, The names and affiliations of the experts, A brief introduction explaining the topic or technique or concepts, A summary of the key aspects, The authors listed in accordance with their role and contribution