Leibniz Research Alliance 'Value of the Past'
Save the Date and Call for Papers for the conference:

Artificial Intelligence in Archives and Collections.

Practices, Potentials, and Evidence Production in Dealing with Images and Multimodal Cultural Heritage

Marburg, 12-13 December 2024

Hybrid format: in-person and virtual
Conference languages: German and English

Dates and Conference Venue:

Thursday, December 12th, 12:30 - 19:30
Friday December 13th, 9.00 - 15:30

Herder-Institut für historische Ostmitteleuropaforschung – Institut der Leibniz Gemeinschaft, Gisonenweg 5-7, 35037 Marburg, Germany.

Committee: Elke Bauer, Simon Donig, Annette Frey, Dominik Kimmel

The Research Lab 1.3. 'Digital Heuristics and Digital History' of the Leibniz Research Alliance 'Value of the Past' is organising a conference in Marburg on artificial intelligence in heritage institutions, such as archives and collections, and how these new technologies are transforming archival institutional practices. Topics will primarily focus on – but are not limited to – visual sources, such as photography and graphic collections or those with mixed image-text sources and multimodal information processing.

The conference provides a forum for researchers and practitioners from the humanities, archives and collections to connect with researchers and engineers in the field of artificial intelligence, computer science and the digital humanities, to discuss new findings, and to exchange experiences. The event promotes an interdisciplinary, cross-sectoral dialogue between research, development and practice. We cordially invite stakeholders from all areas in the field. Attendance without contribution to the programme is also possible.
(See below for details on how to submit a paper and register for the conference)

Key Topic: Dealing with Images and Multimodal Cultural Heritage
In the years to come, curatorial and archival processes in memory and heritage institutions (including key aspects of cataloguing such as description, classification and categorization) will be increasingly supported by automated systems and artificial intelligence. These practices attribute value to sources and link archival materials and collection objects to societal narratives. Collections and archives thus form an essential basis for memory-related discourses and shape our view of the past.

New technologies have now reached the stage where they are potentially suitable for the requirements of cultural heritage institutions. There is potential promise in the partially automated indexing and cataloguing of historical sources, and particularly of digital images, the semantics and meaning of which have until recently only been accessible to the human eye – and not the machine. Images can now be automatically described in semantic terms and therefore made findable. AI methods – and most recently multimodal AI processing – are opening up new possibilities for automatic text and layout recognition, automated image annotation, and the analysis of visual sources and their contextualisation (e.g. text-image combinations or audiovisual sources).

At the same time, however, there is a lack of knowledge about how evidence – and facts – are generated and how AI processes affect the attribution of authenticity to archival documents and photos. At this moment, the humanities lack semantically high-quality and subject-appropriate training data sets. Similarly, there is hardly any agreement about what constitutes an acceptable outcome of computational classification processes, or what benchmarks should be used to evaluate the results. We therefore need to develop best practices (that may tap into explainable Artificial Intelligence (XAI) methods), benchmarks and goals. To increase the value that the information and knowledge held in our archives and collections have for future research, we need to deepen our understanding of processes and algorithms.

The conference will bring together curatorial and archiving knowledge and new AI-based methods, and will also provide a forum for ethical reflections on the use of AI in academic and archival practices. We will consider how automated processing and AI methods require detailed epistemic reflection and methodological-technical control to ensure that no false or tainted evidence is generated. Thus, the conference will discuss the effects of these new technologies on the production of evidence, thereby contributing to the crucial question of how the digital turn is transforming knowledge creation in the humanities and what this means for scholarship in historical disciplines.

Call for Papers

The organisers cordially invite interested parties to submit a paper or poster to the conference. Scientific and application-related contributions as well as reports from collection-, archive- and digitisation practice are equally welcome.

We welcome contributions from a wide range of disciplines such as the history of science or technology, art history, digital humanities, ethics in science, psychology as well as computer science and mathematics.

Papers on experimental approaches, cooperative contributions from author or project teams or industry representatives are also welcome.
Presentations of papers should generally be held in person. In exceptional cases, papers can also be presented online. *(More details on request.)*

Papers and posters can be presented in English or German. If you wish to present in German we kindly ask you to also submit an English summary.

Deadline for Submissions:
Abstracts of 500 words (Papers) and 300 words (Posters) should be submitted via
https://eveeno.com/441936742 **by 29 July 2024 (for papers) or 20 September 2024 (for posters).**

Travel and accommodation: For speakers we have made hotel reservations. We intend to cover travel expenses as far as our budget allows.

Presentations of projects, platforms, tools and software at the 'marketplace':
We also explicitly invite presentations of tools - open source and commercial alike - as well as projects of any kind outside of the sessions. Installations in the lobby of the venue will be provided. Please contact us for details if you are interested.

Publications:
A selection of the contributions to the conference will be published as an edited volume in English.

Contact for programme and submission of papers:
Dominik Kimmel, Leibniz-Zentrum für Archäologie (dominik.kimmel@leiza.de; T: +49 6131 8885 323)

Conference participation without submitting a paper: Registration
For registration and further information please consult the conference website:
https://eveeno.com/441936742

The conference programme will be published here and updated regularly.

Please register as early as possible, even if you are not submitting a contribution. This will help us to plan the conference resources in the best possible way, given the limited space available.

Participation in the conference is free of charge. Kindly refer to the conference website for information on possible costs for meals and the social programme.

Hotels are scarce in Marburg. Please reserve a room in good time.

We welcome papers and posters on the following topics:

1. Exploring and Analysing Visual Sources and Collections (e.g. images, photographs, audiovisual media) from Multimodal Contexts (e.g. textual contexts or image-text combinations).

2. Semantic Segmentation, Classification, Analysing and Understanding Images. The State of the Art in Computer Vision.

3. Opportunities and Challenges for the Automated Indexing and Cataloguing of Visual Sources in Archives and Collections.

4. The Effects of Computational Methods on Image Analytical Research and Visual Studies in Cultural Heritage

Organizers:

- Leibniz-Forschungsverbund „Wert der Vergangenheit", Lab 1.3. Digitale Heuristik und Historik
- Leibniz-Zentrum für Archäologie (LEIZA), Mainz
- Herder-Institut für historische Ostmitteleuropaforschung – Institut der Leibniz-Gemeinschaft, Marburg