Call for Abstracts

Culture Unbound special issue on Digital Cultural Heritage, AI, and Authenticity

In this special issue, we seek to explore the opportunities provided by tools associated with artificial intelligence (AI) for the protection, preservation, promotion, and regeneration of digital cultural heritage. The application of AI tools ranges from image restoration and generation to the identification and classification of artifacts as well as analysing their material properties, the use of language processing for document analysis or the virtual reconstruction and simulation of interactive experiences, among others.

In particular, the pattern recognition abilities of AI tools such as machine learning and deep neural networks offer potential opportunities for representing heritage objects and landscapes that are on the verge of being lost. In this sense, AI facilitates the creation of new digital objects, filling in the gaps in partial digital representations by predicting the most probable missing piece. In a similar vein, generative AI systems have the capability to generate images by extracting statistical patterns from existing datasets.

The utilisation of AI applications in the field of cultural heritage, raises many issues relating to truthful representations where the employed deep learning algorithms create new representations simply based on training data, statistical predictions, or discriminators. A crucial question is also how AI representations tie into the plurality of conceptualisations of authenticity within the many heritage ontologies in which diverse groups of people place specific significance and value on cultural heritage. At the same time as AI could provide opportunities to regenerate lost heritage, its tools could be used to produce convincing fakes including false claims to authenticity and origin that may be perceived as culturally and spiritually offensive.

For this special issue we are looking for contributions that further the stance of the culturally mediated nature of authenticity and take account of the ways in which authenticity no longer can be apprehended solely as a human enterprise as the input is determined by more-than human (artificial) actors. This entanglement of human and more-than-human agencies prompts a problematisation of human control and anthropocentrism that has been the driving force for both heritage and AI regulation. Understanding and implementing AI in an ethical way thus requires new interdisciplinary inquiries, among others, into culture, economics, law, and AI tools such as machine learning models.

We are also looking for contributions from the field of communication studies including for example collaborative efforts between the quadruple helix actors, technology acceptance models (TAM) and citizen engagement methods. This evolving research field addresses challenges posed by technological advancement, ethical considerations, communication, and community engagement and invites a political, ethical and legal debate that can guide the responsible use of AI technologies in the preservation and representation of cultural heritage with social, economic and cultural impacts.

Elaborating on issues concerning authenticity in the use of AI for preserving cultural heritage, in this special issue, we invite contributions from all relevant fields and disciplines. Multidisciplinary approaches are particularly welcome.

Important dates:
30 April 2024: Submission of initial Abstract (max 500 words)
31 May 2024: Decisions on abstracts and call for full paper
15 Nov 2024: Deadline for full-article submission

Editorial board:
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