

1 ST INTERNATIONAL AND INTERDISCIPLINARY *Conference*

Immersive Technologies and Heritage Valorization: Perspectives & Innovations



MAY
 08-10, 2025



IHEC, SFAX

Submission calendar

November 15: Publication of the call for extended abstracts.

January 15: Submission deadline for extended abstracts.

February 28: Notification of the scientific committee .

April 7: Full papers submission.

VR/AR and cultural heritage

The impact of immersive technologies on the user experience and valorization of heritage sites.

Immersive storytelling

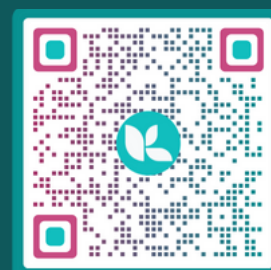
The use of immersive technologies to enhance the understanding of cultural heritage.

Heritage preservation technics

The role of immersive technologies in conserving cultural and archaeological sites.

Design and user experience

Designing interactive immersive experiences for cultural heritage.



Topics and insights



<https://techimmersive.sciencesconf.org/>

NB: Scan the QR code to register on the platform of the conference and upload your submission

Strategies of accessibility sustainability

Strategies for making heritage accessible and sustainable through immersive technologies.

Ethical considerations

Reflecting on the ethical implications of using immersive Technologies in cultural heritage.

Creative industries and heritage

The role of immersive technologies in promoting heritage within the creative industries.

ICC collaboration and innovation

Impact of partnerships between ICCs and other sectors on cultural innovation.

Artificial intelligence-generated image

Immersive Technologies and Heritage Valorization: Perspectives & Innovations



Context

In recent years, immersive technologies have radically transformed the cultural and creative industries (CCIs), offering new perspectives for innovative heritage valorisation (Dordio et al., 2024; Rieple et al., 2023). These advances provide an unprecedented opportunity to redefine how Cultural Heritage (CH) is experienced, communicated and preserved (Zhang et al., 2024). In this new digital era, CCIs are increasingly exploring the power of Digital Cultural Heritage (DCH) to enrich personalised User eXperiences (UX) and integrate contextual offerings within immersive virtual environments (Dimonopoli, 2023; Rieple et al., 2023; Vytkaľov et al., 2024).

As a result, Cultural User Experience (CUX) has emerged as a critical component in the digital heritage landscape (Konstantakis & Caridakis, 2020). Through immersive technologies such as Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (XR), it is now possible to track user behaviour and cultural identities in real time, providing new perspectives for visitor engagement in dynamic digital spaces (Wang & Meng, 2023). This technology opens the door to innovative forms of cultural expression, offering both visitors and creators new ways to interact with and contribute to cultural content.

In addition, immersive technologies not only facilitate the exploration of CH, but also promote cross-cultural dialogue by enabling the seamless exchange of information between different cultures. This promotes global connectivity and makes cultural products and experiences accessible to a wider audience. The success of these initiatives is closely linked to the integration of paradigms, models and methodologies that ensure cultural relevance and accessibility, as well as the development of digital tools for the creation, preservation and dissemination of CH (Konstantakis & Caridakis, 2020).

UX and User Interface (UI) designers are increasingly tasked with integrating cultural elements (visual, emotional) into their conception to create relevant, engaging and accessible interactions with digital content (Okanovic et al., 2022). Best practices are emerging to personalise immersive UX, enhance brand identity and foster consumer loyalty, with a strong focus on cultural and artistic dimensions. By investing in CUX, CCIs can improve visitor satisfaction, increase intention to return and enhance positive word-of-mouth, which contributes to the sustainability of the sector (Konstantakis & Caridakis, 2020; Zemite et al., 2023).

The intersection of immersive technologies and cultural heritage offers many opportunities for innovation. For example, in the audiovisual and film sectors, immersive technologies enable new cinematic experiences that engage audiences in ways previously unimaginable (Mateer, 2017). XR and immersive sound design can transform the storytelling experience, offering viewers a deeper, more interactive connection to the narrative. In the music and cultural industries, advances in XR are also providing artists with the opportunity to explore new forms of expression and performance by integrating interactive elements into the auditory and visual experience, breaking the boundaries of traditional formats (Turchet et al., 2021).

Heritage Building Information Modeling (HBIM) and other Digital Cultural Heritage Models (DCHM) are emerging as essential tools for preserving and presenting cultural sites in a digital environment (Buragohain et al., 2024). These technologies enable detailed, data-driven reconstructions of heritage sites, allowing users to virtually explore and interact with them, thereby enhancing both the preservation and accessibility of cultural landmarks. This is particularly relevant to the tourism industry, as HBIM enables cultural sites to be digitally accessible, enhancing the tourist experience and providing new ways to engage with heritage from a distance (Kim et al., 2018). DCHM and applications related to digital technologies are now revolutionizing the fields of art, archaeology and architectural history by enabling the preservation and dissemination of artefacts and historic sites in a more interactive, accessible and sustainable way. In addition, serious games are increasingly used as a tool to communicate cultural heritage education to younger generations, offering immersive, interactive experiences that mix learning with entertainment (Kleftodimos et al., 2023).

The purple economy, at the intersection of culture, creativity and technology, is key to transforming cultural heritage into value-added experiences. Immersive technologies help CCIs generate economic growth, foster innovation and create new markets in areas such as immersive tourism, travel, education, construction and the arts, making culture a key driver of sustainable development. Several specialised tools allow designers to create and test concepts based on this digital technology (Boboc et al., 2022; Oladokun et al., 2024). These tools promote cultural preservation and a user-centred approach, while integrating cultural and artistic dimensions, thus supporting a rapidly growing XR design ecosystem.

Immersive Technologies and Heritage Valorization: Perspectives & Innovations



Given these innovations, there is a need for theoretical reflections and testing of practical applications that explore the potential of immersive technologies across a range of disciplines, **including the humanities, visual arts, cinema, design, music, architecture, economics, management, engineering and multimedia**. The post-digital era encourages researchers and practitioners to explore how immersive technologies can benefit not only the economy and heritage preservation, but also the wider cultural industries. However, the key question remains: **How can we effectively apply the distinctive features of immersive and interactive technologies while taking into account the unique contexts and challenges faced by the CCIs and the economy overall?**

We accept a diverse format to accommodate different approaches and types of content, including conceptual papers, empirical research, literature reviews, case studies and practice-oriented papers.

Topics included but are not limited to:

- 1. Virtual and augmented reality applications:** Exploring how VR and AR can enhance the experience of cultural heritage sites.
- 2. Digital storytelling in cultural heritage:** Using immersive technologies to enhance the understanding of cultural heritage.
- 3. Preservation techniques :** How can immersive technologies help in the preservation of cultural artefacts?
- 4. User Experience and interaction design:** Best practices for designing engaging immersive experiences in cultural heritage contexts.
- 5. Accessibility, inclusivity and sustainability strategies:** Strategies for using immersive technologies to make cultural heritage accessible to diverse audiences from a sustainable and inclusive perspective, involving communities and individuals in heritage projects.
- 6. Ethical considerations:** Addressing the ethical implications of using immersive technology in cultural heritage.
- 7. Case studies:** Successful implementations of immersive technologies in museums, heritage sites or cultural festivals.
- 8. Future trends:** Predictions for the development of immersive technology in the heritage sector. The convergence of disciplines such as music, visual arts and technology in the exploration of cultural heritage; the role of CCIs as a catalyst for innovation.
- 9. Community engagement:** The role of immersive technology in promoting community involvement in heritage projects. Exploring collaborations between CCIs and their impact on innovation performance.
- 10. Creative industries and heritage:** The role of immersive technology in the creative industries and its impact on heritage conservation and promotion.

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November 15: Publication of the call for extended abstracts.

January 15: Submission deadline for extended abstracts.

February 28: Notification from the scientific committee to authors.

April 7: Deadline for submission of full papers.

Conference Dates: May 8th, 9th, and 10th at IHEC Sfax, University of Sfax, Tunisia.

Submission modalities

Paper submissions are welcomed in English or French, **with a maximum of 4 pages, following the conference template available on the conference website**. The Extended abstract **should not exceed 2500 words (references not included)** and it should address the following sections: **Introduction, Problem statement, Methods, Findings and Implications**.

[For any submission, please register on the conference website: https://techimmersive.sciencesconf.org/](https://techimmersive.sciencesconf.org/)

For any questions, you can contact the conference organizers at: manel.benayed@ihecs.usf.tn ; hela.benmalem@isamgb.u-gabes.tn

Accepted and presented papers will be published after a rigorous peer-review process. Full papers will be published in a special issue of an indexed international journal that will be communicated.

Immersive Technologies and Heritage Valorization: Perspectives & Innovations



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Immersive Technologies and Heritage Valorization: Perspectives & Innovations



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