



Graphic Arts in the Age of Digital Intelligence and Heritage Preservation (DP2)

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"Graphic Arts in the Age of Digital Intelligence and Heritage Preservation"

Track Summary:

This track explores the evolving role of Graphic Arts technologies as both cultural guardians and engines of innovation in the context of intelligent production ecosystems. It invites contributions that highlight how the Graphic Arts are advancing in tandem with developments in artificial intelligence, machine learning, and immersive media, while also serving as powerful tools for the digitization, reproduction, and long-term safeguarding of cultural heritage. Interdisciplinary approaches that bridge design, technology, and communication are encouraged, with a focus on practice-led research, experimental methodologies, and sustainable frameworks.

Sub-track 1:

"Preserving the Roots: Graphic Arts Technologies in the Digitization and Reproduction of Cultural Heritage"

This session investigates how contemporary Graphic Arts technologies—such as high-fidelity digital imaging, color management, digital twins, and advanced print reproduction—are employed to document, restore, and disseminate tangible and intangible cultural heritage. Topics include the use of 2D/3D digitization, hybrid media, virtual/augmented reality, and reproduction techniques for museums, archives, and cultural institutions.

Potential themes:

1. *Digitisation workflows for archival materials and visual artifacts*
2. *Color management and print fidelity in heritage reproduction*
3. *Facsimile reproduction of cultural products and art*
4. *Use of digital twins and immersive media for cultural interpretation*
5. *Sustainable materials and techniques for heritage documentation*
6. *Ethical issues in the digital mediation of cultural heritage*



7. Interdisciplinary methodologies for visual heritage conservation

Session 2:

"Creative Machines: AI-Driven Production in the Graphic Arts"

This session focuses on how machine learning, creative artificial intelligence, and intelligent automation are reshaping the workflows, aesthetics, and pedagogies of the Graphic Arts. It welcomes theoretical and applied research on human-AI collaboration in image generation, layout automation, predictive color science, and adaptive publishing. Emphasis is given to creative autonomy, authorship, and the ethics of AI in visual communication.

Potential themes:

Generative AI for print and cross-media production

Reinforcement learning and intelligent layout composition

Predictive algorithms in prepress and materials optimization

Computational creativity and authorship in the AI era

Human-in-the-loop systems for co-creation in design and printing

Session 3:

"Graphic Media Design: Visual Communication at the Intersection of Culture, Technology, and Ethics"

This session focuses on the role of Graphic Media Design as a mediator between visual culture, digital technologies, and societal transformation. We invite papers that explore contemporary practices in typographic systems, hybrid publishing, transmedia narratives, critical visual storytelling, and speculative or research-based design. Emphasis is placed on how designers navigate and shape the visual language of a rapidly changing media ecology.

Potential themes:

Graphic Design as mediator of cultural identity in digital environments

Designing for hybrid experiences: print, screen, spatial and immersive media

Visual storytelling and typographic systems in data-rich contexts

The role of design in participatory archives and community memory



Ethics, authorship, and semiotic tensions in post-digital design

Intersections of graphic design with speculative design, critical making, and social innovation

Hybrid publishing and cross-media editorial design

Experimental typography and visual language systems

Algorithmically generated and AI-assisted design practices

Ethical and cultural dimensions of graphic communication

Design for marginalised identities and inclusive visual narratives

Visual storytelling in interactive and screen-based media

Research-based approaches in graphic media design