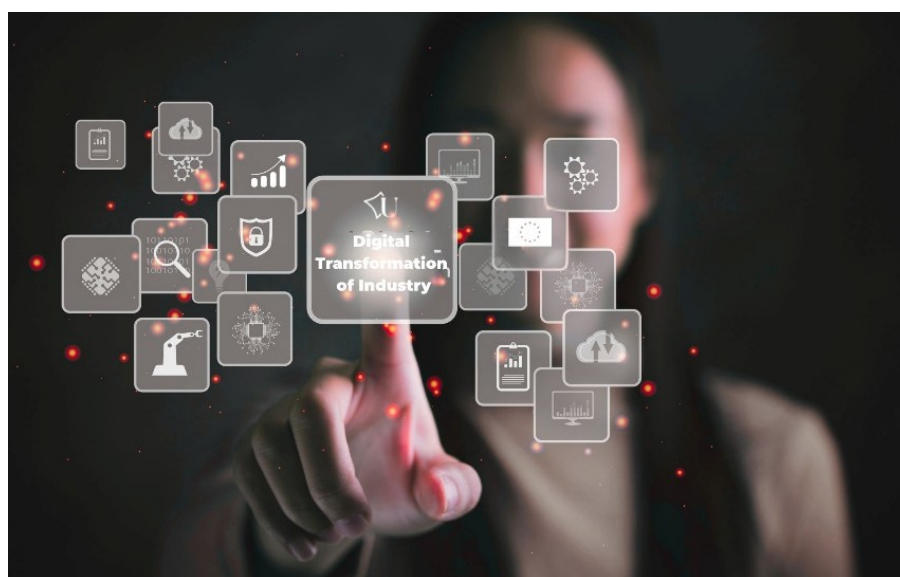

Ulysseus R&I Conference 2025

Navigating Pathways: Digital Transformation of Industry

20 October 2025

Technical University of Košice, Slovakia



**Abstracts
for Technical Session 4:
Art&Tech Session**



Technical Session 4: Art&Tech Session

Session Chair: Manuela Raisová (Technical University of Košice)

Presentations of research and innovation for the decarbonization of construction activities (through low-emission construction processes and materials in the circular economy), research and innovation for the decarbonization of industry, presentations of innovation and best-practices in sustainability and ESG.

This session highlights the intersection of creativity, cultural industries, and digital transformation. It explores how artistic practices, immersive technologies, and innovative research can reframe industrial and societal challenges.

Using European Strategy as a Scaling-Up Mechanism for Local Ecosystems: A Case Study of CCIs

Muriel Dal Pont Legrand (University Côte d'Azur)

UniCA has developed an innovative ecosystem vision based on tangible elements anchored at multiple levels, including academic and societal ones. Our cultural and creative industries ecosystem is emblematic of this strategy. It is locally anchored and draws on the strengths of the region's economic and institutional partners, as well as academic excellence. It includes various stakeholders and end users with the objective of guaranteeing the efficient dissemination and transfer of results. This ecosystem is then projected internationally – in this case, to Europe – through its identification as a key partner in the EIT CCI's leading consortium.

Sonic Co-Agency: Sonification as Interface in Human-Robot Interaction at the Robotics Innovation Hub of Genova

Clio Flego (University of Genoa)

Sonic Co-Agency is an interdisciplinary project at the University of Genova exploring human-robot collaboration in sound production. By integrating sonification into robot teleoperation, the system embeds human and non-human agents within a recursive sonic ecology, where sound acts as a dynamic perceptual interface guiding creative interactions. Artists and technologists work together to co-produce soundscapes, leveraging feedback-based and in-the-loop data processing to enable adaptive, relational, and emergent behaviors. In this framework, sound is not merely an output but a mediating interface through which artistic decisions, robot responses, and environmental conditions continuously interact. The project combines principles from interactive art practice, robotics, and auditory display, fostering iterative improvisation and highlighting co-agency between participants and machines. Sonic Co-Agency challenges traditional notions of authorship and control, offering a model for collaborative creation that bridges technical innovation and expressive practice.

The Museum as Interface: The Future of Andy Warhol's Factory (MMUAW 2.0)

Richard Kitta, Martin Cubjak (Technical University of Košice)

The MMUAW 2.0 project is an ambitious architectural and media-art reconstruction of the Andy Warhol Museum of Modern Art in Medzilaborce – the only museum of its kind in the world outside Pittsburgh. Initiated by director Martin Cubjak and developed with Richard Kitta, Štefan Zahatňanský, Tomáš Boroš, and Martin Kudla from the Faculty of Arts at TUKE, it reimagines the museum as a hybrid interface between past and future, local and global.

The concept combines architectural preservation with an expandable, responsive structure that integrates media art and immersive technologies into the museum's physical and digital layers. A newly designed façade grid serves as both aesthetic and interactive surface, enabling projections, real-time installations, and modular artistic interventions. A "roof landscape" creates an outdoor exhibition and performance zone, dissolving boundaries between interior and exterior, archive and living artwork. Drawing on Warhol's legacy of experimentation and mass media, MMUAW 2.0 positions the museum as a dynamic cultural laboratory. Interactive interfaces allow visitors to engage with Warhol's oeuvre and contemporary art through AR/MR applications, responsive installations, and flexible co-educational zones. Envisioned as a platform for research at the intersection of art and science, it builds a sustainable framework for collaboration between TUKE, the museum, and international artist residencies. The project revitalizes a regional landmark while forging a translocal dialogue between Miková – Warhol's ancestral village – and New York's Factory, turning the museum into a living interface that extends Warhol's legacy into the 21st century.

BrandNEW MEDIA in AFA Katowice

Ksawery Kaliski, Marian Oslislo (ASP Katowice; University of Silesia in Katowice, Poland)

"We drift into the unknown on a 'ship of fools.' Modern man, seeking to kill the void, searches for ever-stronger stimuli in the multimedia substrata created by new technologies." This quotation from Krzysztof Penderecki's book *The Labyrinth of Time* refers to the condition of contemporary humanity and its pursuit of experience in a world saturated with multimedia stimuli. Cyberculture, that is, contemporary culture intertwined with the computer, combines such features as interactivity, multimedia, globalization, and convergence. It becomes evident that technology and its ongoing transformations are highly significant factors of cultural change in today's world. The pace of these changes makes critical reflection increasingly difficult.

At the Department of New Media and in the Multimedia Activity Lab we strive to engage with issues of pressing relevance and importance from the perspective of contemporary social, media, and technological processes. We reflect on various experiments, on the role of images generated by artificial intelligence, on interactivity, and on new audiovisual forms in today's culture. If we consider Ulysses in Homer's *Odyssey* and his journey to the mythical Ithaca, or what befalls the protagonists in James Joyce's *Dublin*, then surely the 25-year journey of the Academy of Fine Arts in Katowice toward the establishment of the New Media program may be seen as a similar experience. We have gathered an immense store of experience, yet the shoreline continues to expand and extend under the influence of technological

development, shifting strategies, and changing gravities. Will we reach the shore? Or perhaps the journey itself proves more important than the attainment of the destination – for what are we to do with it once it is achieved?

On Exhibiting AI Art: Curating AI Space at the 8th Silesian Science Festival in Katowice as a Challenge in Knowledge Construction and Communication

Anna Maj (AGH University of Krakow, Poland)

Within contemporary museology, science festivals may be conceptualized as “ephemeral museums,” temporarily assuming the interpretive and mediating functions of permanent institutions. In Upper Silesia, where a science and technology museum is absent, such events act as surrogates. This presentation examines the creation of the AI Space of the 8th Silesian Science Festival – the largest in Central Europe – staged as part of the European City of Science Katowice 2024. Drawing on media art curatorial strategies, including Hannes Leopoldseder’s Museum of the Future or Guerilla Science concept, it analyses the construction and communication of knowledge at the intersection of art, science, and emerging technologies. The study addresses curatorial constraints inherent to time-bound, thematically profiled events and evaluates the potential of media art as a mode of knowledge mediation and public engagement.

More Information

Conference Page: <https://ulysseus.eu/events/navigating-pathways-digital-transformation-of-industry-conference-2025/>

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