



ARTECH 2025

B R A G A – P O R T U G A L

MEDIA ART CULTURES,
COMMUNITIES & TERRITORIES

12TH INTERNATIONAL CONFERENCE
ON DIGITAL AND INTERACTIVE ARTS

UNIVERSITY OF MINHO
BRAGA, PORTUGAL

26-28 | NOVEMBER | 2025

PROCEEDINGS



EDITORS

LUCAS FABIAN OLIVERO
EMÍLIA SIMÃO
ALBERTO SÁ
ADÉRITO FERNANDES-MARCOS

ORGANISED BY

UNIVERSITY OF MINHO
COMMUNICATION AND SOCIETY RESEARCH CENTRE (CECS)
THE ARTECH-INTERNATIONAL ASSOCIATION



PROCEEDINGS
OF THE 12TH INTERNATIONAL CONFERENCE ON DIGITAL
AND INTERACTIVE ARTS
26-28 NOVEMBER 2025 | BRAGA | PORTUGAL

CHAIRS

ADÉRITO FERNANDES-MARCOS, Honorary Chairman
ALBERTO SÁ, General Chairman
SUSANA GAUDÊNCIO, President of the Int. Scientific & Art Committee
DANIEL BRANDÃO, Local Organisation Chairman

EDITORS

LUCAS FABIAN OLIVERO
EMÍLIA SIMÃO
ALBERTO SÁ
ADÉRITO FERNANDES-MARCOS

ORGANISED BY

UNIVERSITY OF MINHO / COMMUNICATION AND SOCIETY
RESEARCH CENTRE (CECS)
THE ARTECH-INTERNATIONAL ASSOCIATION



Title

Proceedings of the 12th International Conference on Digital and Interactive Arts:
ARTECH 2025: Media Art Cultures, Communities & Territories

Editors

Lucas Fabian Olivero

Research Centre in Arts and Communication (CIAC)
Portuguese Open University and Algarve University, Portugal
lucas.olivero@uab.pt

Emília Simão

Research Center of Architecture, Urbanism and Design (CIAUD)
Portucalense University, Portugal
emiliasimao@upt.pt

Alberto Sá

Communication and Society Research Centre (CECS)
Institute of Social Sciences, University of Minho, Portugal
albertosa@ics.uminho.pt

Adérito Fernandes-Marcos

Research Centre in Arts and Communication (CIAC)
University of Saint Joseph, Macau
aderito.marcos@usj.edu.mo

Year

2025

Cover Image

Daniel Brandão, 2025

ISBN

979-8-4007-2001-7

November 2025



The Association for Computing Machinery
1601 Broadway, 10th Floor
New York, New York 10019, USA

ACM COPYRIGHT NOTICE. Copyright © 2025 by the Association for Computing Machinery, Inc. Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers, or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from Publications Dept., ACM, Inc., fax +1 (212) 869-0481, or permissions@acm.org.

For other copying of articles that carry a code at the bottom of the first or last page, copying is permitted provided that the per-copy fee indicated in the code is paid through the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, +1-978-750-8400, +1-978-750-4470 (fax).

ISBN: 979-8-4007-2001-7

Preface

Two decades of ARTECH conferences

On 12 July 2004, we organised the first edition of ARTECH at the Faculty of Sciences of the University of Lisbon, which we named the “First Luso-Galician Workshop on Digital Arts – Artech 2004”. From the outset, our aim was to establish a series to be held alternately in Portugal and Galicia, in order to “... encourage contact and collaboration between communities on both sides of the border who deal with so-called digital arts, considering their multiple aspects, whether artistic, technological, or social”.

ARTECH 2004 originated from discussions within the consortium of the “@artec – Art and Technology in Cultural Industries” project, funded by the InterReg III A programme. Its objectives included developing technological platforms to support artistic and cultural activities linked, directly or indirectly, to the “Bienal de Arte de Cerveira” and the “Bienal de Arte de Orense”. It was, in essence, a cross-border initiative between Minho and Galicia. The organisation of Artech 2004 was a collaborative effort by the following entities: the Centre for Computer Graphics, the University of Minho (Department of Information Systems), the Faculty of Fine Arts of the University of Vigo, the Project Association – Cultural Development Unit of the Cerveira Biennial, and Eurographics - Portuguese Chapter. The team was led by Adérito Fernandes-Marcos, President of the Scientific and Artistic Committee, with Henrique Silva from the Cerveira Biennial and Lola Dopico from the Faculty of Fine Arts of the University of Vigo serving as vice-presidents. The local organising committee was headed by Leonel Valbom from the Centre for Computer Graphics and Vitor Sá from the University of Minho.

The subsequent editions took place in **Vila Nova de Cerveira** (2005, organised by the Cerveira Art Biennial), **Pontevedra** (2006, Faculty of Fine Arts of the University of Vigo, Galicia), **Porto** (2008, School of Arts of the Universidade Católica Portuguesa), **Guimarães** (2010, School of Architecture and School of Engineering of the University of Minho), **Faro** (2012, Faculty of Social and Human Sciences, Higher Institute of Engineering of the University of Algarve), **Óbidos** (2015, Universidade Aberta), **Macau** (2017, Faculty of Creative Industries of the University of Saint Joseph), **Braga** (2019, Universidade Católica Portuguesa, Teatro Circo), **Aveiro** (2021, University of Aveiro), **Faro** (2023, Centre for Research in Arts and Communication of the University of Algarve); and now once again in **Braga**, with local organisation by the Centre for Communication and Society Research of the University of Minho.

In 2008, we took a bold step forward: we transformed ARTECH into an international conference, broadening our horizons and inviting voices from around the globe to enrich the creative dialogue. Four years later, in 2012, a significant moment brought everyone together at an *ad hoc* general assembly, where it became clear that it was time to strengthen the bonds within our community. It was then that the idea emerged to create an association dedicated to representing and driving the collective, embracing a more international role and proudly adopting English, Portuguese, and Spanish as the tools for our expression.

The following year, in 2013, the Artech-International Association was officially founded, cementing the commitment to unity and collaboration among all. In 2017, we celebrated another achievement: we

registered the conference proceedings book on the prestigious ACM (Association for Computing Machinery) platform, ensuring Scopus indexing and further showcasing our accomplishments on the global stage. Each step was a collective celebration of the innovative spirit that defines the ARTECH series.

Since its inception, the ARTECH conference series has become a true platform for creativity and innovation, bringing together hundreds of remarkable artefacts, digital and interactive art installations that challenge the senses, pioneering scientific articles, and provocative artistic manifestos. Each edition has been characterised by unforgettable encounters and intense debates, where ideas have crossed paths, inspired one another, and given rise to new forms of expression. These vibrant moments have not only advanced the academic and artistic development of digital and interactive art but also broadened the horizons of media, digital, and computational art, transforming the **ARTECH community into a dynamic laboratory of experimentation and dialogue, where talent and vision come together to shape the future.**

Today, as we celebrate two decades of ARTECH, we proudly affirm that every effort, encounter, and collaboration has been worthwhile — for together **we have forged a vibrant, global community,** destined to lead the future of digital and interactive art in the face of the challenges of process virtualisation, global connectivity, and the emergence of the post-digital era, which unifies and expands tangible and intangible realities.

We march ahead confidently for the next 20 years!

Macau, November 23, 2025

Adérito Fernandes-Marcos

President of Artech-International

Email: aderito.marcos@artech-international.org

Prefácio

Duas décadas de conferências ARTECH

Foi em 12 de julho de 2004 que organizamos a primeira edição da ARTECH, nas instalações da Faculdade de Ciências da Universidade de Lisboa, que denominamos o “Primeiro Workshop Luso-Galaico de Artes Digitais - Artech 2004”, já com a intenção de estabelecer a série a organizar alternadamente em Portugal e na Galiza, para “... *fomentar o contacto e a colaboração entre as comunidades dos dois lados da fronteira, que lidam com as denominadas artes digitais, considerando as suas múltiplas facetas, tanto do foro artístico, tecnológico ou social*”.

A ARTECH 2004 resultava da reflexão ocorrida no interior do consórcio do projeto “@artec – Arte e Tecnologia nas Indústrias Culturais”, financiado pelo programa InterReg III A, e que visa desenvolver, entre outros, as plataformas tecnológicas de apoio às atividades artísticas e culturais que acontecem direta ou indiretamente associadas aos eventos “Bienal de Arte de Cerveira” e “Bienal de Arte de Orense”, ou seja, era claramente uma iniciativa originalmente de natureza transfronteiriça Minho-Galiza. A organização do ARTECH 2004 foi conjunta e assumida pelas seguintes entidades: o Centro de Computação Gráfica, a Universidade do Minho (Departamento de Sistemas de Informação), a Faculdade de Belas Artes da Universidade de Vigo, a Associação Projeto – Núcleo de Desenvolvimento Cultural da Bienal de Cerveira e o Grupo Português de Computação Gráfica. A equipe foi liderada por Adérito Fernandes-Marcos, Presidente do Comité Científico e Artístico, com Henrique Silva, da Bienal de Arte de Cerveira, e Lola Dopico, da Faculdade de Belas Artes da Universidade de Vigo, como vice-presidentes; a comissão organizadora local foi assumida por Leonel Valbom, do Centro de Computação Gráfica, e Vitor Sá, da Universidade do Minho.

As edições seguintes ocorreram em **Vila Nova de Cerveira** (2005, organizada pela Bienal de Arte de Cerveira), **Pontevedra** (2006, Faculdade de Belas Artes da Universidade de Vigo, Galiza), **Porto** (2008, Escola das Artes da Universidade Católica Portuguesa), **Guimarães** (2010, Escola de Arquitetura e Escola de Engenharia da Universidade do Minho), **Faro** (2012, Faculdade de Ciências Sociais e Humanas, Instituto Superior de Engenharia da Universidade do Algarve), **Óbidos** (2015, Universidade Aberta), **Macau** (2017, Faculdade de Indústrias Criativas da Universidade de São José), **Braga** (2019, Universidade Católica Portuguesa, Teatro Circo), **Aveiro** (2021, Universidade de Aveiro), **Faro** (2023, Centro de Investigação em Artes e Comunicação da Universidade do Algarve); e agora novamente em **Braga**, com organização local do Centro de Investigação de Comunicação e Sociedade da Universidade do Minho.

Em 2008, demos um salto ousado: transformámos o ARTECH numa conferência internacional, alargando horizontes e convidando vozes do mundo inteiro para enriquecer o diálogo criativo. Quatro anos depois, em 2012, um momento marcante reuniu todos os presentes numa assembleia geral *ad hoc*, na qual ficou claro que era hora de fortalecer os laços da nossa comunidade. Surgiu então a ideia de criar uma associação dedicada a representar e impulsionar o coletivo, abraçando uma intervenção mais internacional e assumindo, orgulhosamente, as línguas inglesa, portuguesa e castelhana como veículos da nossa expressão.

No ano seguinte, em 2013, nasceu oficialmente a Associação Artech-Internacional, selando o compromisso de união e colaboração entre todos. E, em 2017, celebrámos mais uma conquista: registámos o livro de atas da conferência na prestigiada plataforma da ACM (*Association for Computing Machinery*), garantindo a indexação em Scopus e projetando ainda mais os nossos feitos no cenário global. Cada etapa foi uma celebração coletiva do espírito inovador que define a série ARTECH.

Desde o seu início, a série de conferências ARTECH transformou-se num verdadeiro palco de criatividade e inovação, reunindo centenas de artefatos surpreendentes, instalações de arte digital e interativa que desafiam os sentidos, artigos científicos pioneiros e manifestos artísticos provocadores. Cada edição foi marcada por encontros inesquecíveis e debates intensos, nos quais ideias se cruzaram, inspiraram e deram origem a novas formas de expressão. Estes momentos vibrantes não só impulsionaram o avanço académico e artístico da arte digital e interativa, como também expandiram os horizontes da média-arte digital e computacional, tornando **a comunidade ARTECH um verdadeiro laboratório vivo de experimentação e diálogo, onde talento e visão se unem para moldar o futuro.**

Hoje, ao comemorarmos duas décadas de ARTECH, afirmamos orgulhosamente que cada esforço, encontro e colaboração valeram a pena — pois, juntos, **forjamos uma comunidade vibrante e global**, destinada a liderar o futuro da arte digital e interativa diante dos desafios da virtualização de processos, da conexão mundial e do surgimento do pós-digital, que unifica e amplia as realidades tangíveis e intangíveis.

Avançamos com confiança para os próximos 20 anos!

Macau, 23 de novembro 2025

Adérito Fernandes-Marcos

Presidente da Artech-International

Email: aderito.marcos@artech-international.org

Preface

“Expanded Media Arts: Ecologies, Territories and Communities”

The 2025 edition of ARTECH takes place at a moment in which technology-mediated artistic production is confronted, simultaneously, with unprecedented technical acceleration and profound epistemological tensions. The convergence of Artificial Intelligence (AI) systems, immersive ecologies, data infrastructures, community practices and territorial dynamics calls upon Media Arts today to redefine not only their methods, but also their role in knowledge production, social mediation and cultural critique.

The theme of this year’s conference, “Media Art Cultures, Communities & Territories”, seeks precisely to bring into discussion this expanded condition of Media Arts, which have ceased to constitute a strictly artistic or technologically celebratory domain and have instead assumed the role of research laboratories operating in contexts where social and technological dynamics intersect, ecologies of public participation are cultivated, alternative modes of knowledge production are explored, and aesthetic-political dispositifs emerge with territorial impact and an activist vocation. The contributions brought together in this “Book of Proceedings” bear witness to this plurality and reaffirm the urgency of critical, situated and interdisciplinary approaches.

The involvement of the Master’s Programme in Media Arts in the organisation of the Conference, through the active participation of both academic staff and students, also invites reflection on the challenges that currently confront postgraduate education. This level of academic training should not be reduced to mere technological skill updates but rather should focus on the capacity to form researchers and creators who can operate critically within complex digital environments, where social, cultural, and technological factors intersect, thereby fostering an integrated ecology of knowledges. This reconfiguration is not only pedagogical; it is structural, defining new professional trajectories and demanding flexible, interdisciplinary curricula grounded in research-creation practices.

The artworks and papers included in this edition, distributed across eighteen thematic sessions and an artistic exhibition supported by a digital platform in which artistic practice and scientific research converge, constitute a privileged observatory of contemporary production in Media Arts. They highlight, from the outset, the central role that Artificial Intelligence has come to play, not as a mere technological trend but as an aesthetic and epistemic agent that problematises fundamental categories of visual culture. The works presented here reconfigure the very notion of language and representation, interrogate the hidden materiality of algorithmic systems, question authorship and originality, archival and memorial regimes, gesture, body and aura, as well as issues of sustainability. The conference thus demonstrates that the relationship between AI and Media Arts is not one of simple instrumental adoption, but of ongoing critical negotiation, requiring informed and responsible practice that is consciously situated within the ethical tensions of the present. Within this framework, Media Arts may operate as a socio-cultural infrastructure that interrogates inequalities, fosters citizen participation and translates these dimensions into concrete artistic practices.

The organisation of an event of this nature is, inevitably, a long-term collective endeavour. It is therefore fitting to express our sincere gratitude to the members of the International Scientific and Artistic Committee, for their careful and indispensable work in the review process; to the authors, for their valuable theoretical and artistic contributions; to the Conference Secretariat, which has served as an essential interlocutor in managing the various strands of the event; to the academic staff and students of the Master's Programme in Media Arts at the University of Minho, for their commitment, availability and exemplary spirit of collaboration in their voluntary work; to the Communication and Society Research Centre (CECS), for its institutional support; and to our local partners, gnracion and Braga - UNESCO Creative City of Media Arts, for their continued support. Our thanks are likewise due to the Research Centre in Arts and Communication at the University of the Algarve, the Doctoral School and the Faculty of Arts and Humanities of the University of Saint Joseph in Macao, for generously sharing their experience in conference organisation. A special word of thanks is extended to Artech-International for placing confidence in our ability to successfully host this 12th edition of the conference.

To all, our deepest thanks.

Alberto Sá

General Chair, ARTECH 2025

University of Minho / CECS

[albertosa@ics.uminho.pt]

Prefácio

“Media Arts em Expansão: Ecologias, Territórios e Comunidades”

A edição de 2025 da ARTECH decorre num momento em que a produção artística mediada por tecnologia se confronta, simultaneamente, com acelerações técnicas sem precedentes e com tensões epistemológicas profundas. A convergência entre sistemas de Inteligência Artificial, ecologias imersivas, infraestruturas de dados, práticas comunitárias e dinâmicas territoriais convoca hoje as Media Arts a redefinirem não apenas os seus métodos, mas também o seu papel na construção de conhecimento, na mediação social e na crítica cultural.

O tema desta edição da Conferência, “Media Art Cultures, Communities & Territories”, procura, precisamente, convocar para discussão esta condição expandida das Media Arts, que deixaram de constituir um domínio estritamente artístico ou de celebração tecnológica para se assumirem como laboratórios de investigação em contextos onde se entrecruzam dinâmicas sociais e tecnológicas, ecologias de participação pública, modos alternativos de produção de saber e dispositivos estético-políticos com impacto territorial e vocação ativista. As contribuições reunidas neste “Livro de Atas” evidenciam esta pluralidade e reafirmam a urgência de uma abordagem crítica, situada e interdisciplinar.

A envolvimento do Mestrado em Media Arts na organização da Conferência, através da participação ativa de docentes e estudantes, convida também à reflexão sobre os desafios que se colocam hoje ao ensino pós-graduado. Este nível de educação académica não se deve limitar à mera atualização tecnológica, mas antes centrar-se na capacidade de formar investigadores e criadores aptos a operar criticamente em ambientes digitais complexos, onde se articulam fatores sociais, culturais e tecnológicos, promovendo uma ecologia integrada de saberes. Esta reconfiguração não é apenas pedagógica, é estrutural, definindo novas trajetórias profissionais e exigindo currículos flexíveis, interdisciplinares e assentes em práticas de investigação-criação.

As obras e artigos incluídos nesta edição, distribuídos em 18 sessões temáticas e uma exibição artística, com suporte de uma plataforma digital onde convergem a prática artística e a investigação científica, constituem um observatório privilegiado da produção contemporânea em Media Arts. Denotam, desde logo, o lugar central que a Inteligência Artificial (IA) vem assumindo, não como mera tendência tecnológica, mas como agente estético e epistémico que problematiza categorias fundamentais da cultura visual. As propostas aqui apresentadas reconfiguram a própria noção de linguagem e de representação, interrogam a materialidade oculta dos sistemas algorítmicos, a autoria e a originalidade, o arquivo e a memória, o gesto, o corpo e a aura, bem como as questões da sustentabilidade. A Conferência demonstra, assim, que a relação entre IA e Media Arts não é de mera adoção instrumental, mas de negociação crítica contínua, exigindo uma prática informada, responsável e conscientemente situada nas tensões éticas do presente. Neste quadro, as Media Arts podem atuar como infraestrutura sociocultural que interroga desigualdades, promove a participação cidadã e articula essas dimensões em práticas artísticas concretas.

A organização de um evento desta natureza é, inevitavelmente, uma empreitada coletiva, de longo curso. Impõe-se, por isso, uma palavra de sincera gratidão aos membros da Comissão Científica e Artística

Internacional e aos seus integrantes, pelo trabalho criterioso e fundamental no processo de revisão. Aos autores, pelas suas valiosas contribuições teóricas e artísticas. À equipa de Secretariado, que se constituiu como interlocutora essencial na gestão dos diferentes dossiês da conferência. Aos docentes e alunos do Mestrado em Media Arts da Universidade do Minho pelo seu empenho, disponibilidade e exemplar espírito de colaboração no trabalho voluntário. Ao Centro de Estudos de Comunicação e Sociedade, pelo acolhimento institucional, e aos parceiros locais, gnration e Braga - UNESCO Creative City of Media Arts, pelo apoio continuado. Ainda ao Centro de Investigação em Artes e Comunicação da Universidade do Algarve, à Escola Doutoral e à Faculdade de Artes e Humanidades da Universidade de São José em Macau, por nos terem emprestado a sua experiência na organização do evento. Um agradecimento especial, ainda, à Artech-International, pela confiança depositada na nossa capacidade de levar a bom porto a organização desta 12ª Conferência.

A todos, o nosso bem-haja!

Alberto Sá

General Chair, ARTECH 2025

Universidade do Minho / CECS

[albertosa@ics.uminho.pt]

Curatorial Statement

Artech 2025 EXPO - Media Art Cultures, Communities and Territories

The online ARTECH Conference exhibition extends the event's research ethos into a shared digital space where artistic practice and scientific enquiry converge. Designed specifically for an online environment, the exhibition turns the screen into an area for exploration — a flexible space where images, code, sound and gestures reveal fresh perspectives on culture, community and technological mediation.

In this networked landscape, artists and researchers explore how digital technologies, ranging from artificial intelligence and virtual environments to interactive systems, robotics and data visualisation, reshape our collective experience of the world. Each artwork operates as both poetic expression and experimental research, providing an insight into the relationship between humans and machines, ecology and computation, and memory and data.

The participating projects examine how communities are formed and sustained in technology and art mediated contexts. Through interactivity, participation and generative processes, among many other approaches, they explore the concepts of empathy, identity and belonging in an age characterised by ubiquitous connectivity. These works serve as a reminder that media cultures are never neutral: they actively shape the way we perceive and relate to one another, as well as to the physical, virtual, and hybrid territories we inhabit.

In this exhibition, territory becomes a porous concept that is simultaneously ecological, political and algorithmic. Some pieces evoke environmental change and the fragility of natural systems, while others generate speculative digital landscapes based on data or code. Together, these pieces offer a broader interpretation of place as a living system in which material and immaterial layers coexist and interact.

By being part of an academic conference, this exhibition demonstrates that artistic creation is a form of research in itself. Each artwork contributes to scientific knowledge by testing new methodologies, metaphors, and interfaces that expand our understanding of media ecologies, digital mediation, and human-technological coexistence.

Although the exhibition takes place online, it is complemented by on-site screenings of the videos during the ARTECH Conference. These encounters provide vital opportunities to engage more deeply with the artworks by facilitating direct dialogue with their creators and research teams. Through these conversations, visitors will be able to grasp the conceptual, technical and ethical dimensions underlying each project, turning observation into critical exchange and shared discovery.

Ultimately, this exhibition invites us to reflect on how we inhabit digital spaces, and on how our actions, data and stories influence the nature of our shared existence. Here, art becomes an exploration, technology becomes an expression, and the conference becomes a community of thought, where media cultures evolve into living, collaborative spaces of imagination and knowledge.

The curator would like to thank all the participating artists for their valuable contributions and extend special thanks to João Martinho Moura, Susana Gaudêncio, Selma Pereira, and Adérito Fernandes-Marcos, whose help was crucial to the exhibition's success.

Pedro Alves da Veiga

CIAC – Centro de Investigação em Artes e Comunicação

Universidade Aberta

Nota Curatorial

Artech 2025 EXPO - Media Art Cultures, Communities and Territories

A exposição online da Conferência ARTECH amplia o espírito de investigação do evento a um espaço digital partilhado, onde a prática artística e a investigação científica convergem. Concebida propositadamente para um ambiente online, a exposição transforma o ecrã numa área de exploração — um espaço flexível onde imagens, algoritmos, sons e gestos revelam novas perspetivas sobre a cultura, a comunidade e a mediação tecnológica.

Nesta paisagem em rede, artistas e investigadores exploram formas como as tecnologias digitais, como a inteligência artificial ou os ambientes virtuais, passando pelas instalações interativas, robótica e visualização de dados, remodelam a nossa experiência coletiva do mundo. Cada artefacto assume-se como expressão poética e investigação experimental, proporcionando uma visão sobre a relação entre humanos e máquinas, ecologia e computação, memória e dados.

Os projetos artísticos participantes analisam como as comunidades são criadas e sustentadas em contextos com mediação tecnológica e artística. Através da interatividade, participação e processos generativos, entre tantas outras abordagens, eles exploram os conceitos de empatia, identidade e pertença numa era caracterizada pela conectividade ubíqua. Estas obras atuam como uma chamada de atenção para o facto de que as culturas mediáticas nunca são neutras: moldam ativamente a forma como nos percebemos e nos relacionamos uns com os outros, bem como com os territórios físicos, virtuais e híbridos que habitamos.

Nesta exposição, o território transforma-se num conceito poroso que é simultaneamente ecológico, político e algorítmico. Alguns artefactos evocam as alterações ambientais e a fragilidade dos sistemas naturais, enquanto outros geram paisagens digitais especulativas baseadas em dados ou código. No seu conjunto, estas obras oferecem uma interpretação alargada do lugar, como um sistema vivo, no qual camadas materiais e imateriais coexistem e interagem.

Ao estar integrada numa conferência académica, esta exposição demonstra que a criação artística é uma forma de investigação em si mesma. Cada projeto artístico contribui para o conhecimento científico, testando novas metodologias, metáforas e interfaces que expandem a nossa compreensão das ecologias dos meios de comunicação, da mediação digital e da coexistência humano-tecnológica.

Embora a exposição decorra online, ela é complementada pelas exibições dos vídeos nos locais das sessões da Conferência ARTECH, fomentando encontros e oportunidades que permitam um envolvimento mais profundo com as obras de arte e um diálogo direto com os seus criadores e equipas de investigação. Através destas conversas, os visitantes poderão compreender as dimensões conceptuais, técnicas e éticas subjacentes a cada projeto, transformando a observação em troca crítica e descoberta partilhada.

Em última análise, esta exposição convida-nos a refletir sobre como habitamos os espaços digitais e sobre como as nossas ações, dados e histórias influenciam a natureza da nossa existência partilhada. Aqui, a arte

torna-se uma exploração, a tecnologia torna-se uma expressão e a conferência torna-se uma comunidade de pensamento, onde as culturas mediáticas evoluem para espaços vivos e colaborativos de imaginação e conhecimento.

O curador gostaria de agradecer a todos os artistas participantes pelas suas valiosas contribuições e gostaria de agradecer especialmente a João Martinho Moura, Susana Gaudêncio, Selma Pereira e Adérito Fernandes-Marcos, cuja ajuda foi crucial para o sucesso da exposição.

Pedro Alves da Veiga
CIAC – Centro de Investigação em Artes e Comunicação
Universidade Aberta

Preface

International Scientific and Art Committee

We are delighted to welcome you to ARTECH 2025, the 12th International Conference on Digital and Interactive Arts, hosted by the Communication and Society Research Centre (CECS) at the University of Minho, in Braga, Portugal. For over 20 years, ARTECH has brought together artists, researchers, and practitioners who work at the intersection of art, science, and technology. The 2025 edition continues this commitment, opening space for imagination, dialogue, and thoughtful reflection on our shared digital lives.

We live in a time shaped by algorithms, networks, and vast infrastructures. Art helps us slow down and examine closely how technology influences our experiences, memories, and futures. ARTECH 2025 invites you to reevaluate the ethical, aesthetic, and ecological dimensions of the digital condition and to explore how creative practice responds to the complexities of contemporary media environments.

This year, we're proud to have received submissions from 34 countries, a sign that our community resonates globally and embodies the ARTECH community's inclusiveness. Our theme, "Media Art Cultures, Communities & Territories," invites us to consider how creative work and practices engage with the ecologies of the digital age. It brings forward notions of belonging, participation, and situated knowledge. Media art operates both as a language and as a laboratory, and therefore proposes ways to shape and share identity, remember and archive experience, and imagine possible futures across environments where the physical meets the virtual and the material meets the computational.

ARTECH 2025 welcomes a wide range of approaches and methods emerging from the convergence of art, science, and technology. Topics include, among others, artificial intelligence and authorship, sustainable and bioremediative practices, interactive and immersive environments, data visualisation and parametric design, creative coding and generative aesthetics, ecological activism, and the pedagogical dimensions of STEAM education.

A signature moment in this year's program is the Virtual Exhibition of Digital Artworks, presenting around thirty projects. While similar initiatives have featured in past editions of Artefacto, this iteration marks its place within ARTECH. The exhibition highlights the various contemporary media art through experimentation and play. Exhibition details are available online on the ARTECH INTERNATIONAL website.

More than a conference, ARTECH 2025 is a living ecosystem of ideas and encounters. It invites us to consider the role of media art in facing urgent planetary challenges and to imagine digital culture as a shared commons, open, collaborative, and transformative.

We are deeply grateful to everyone who makes this possible, to the authors and artists who enrich the program, to the scientific and artistic committees for their thoughtful contributions, and to the organising team at CECS for their dedication. Above all, we thank the participants whose curiosity and creative spirit keep the ARTECH community vibrant.

Susana Gaudêncio

**President of the ARTECH 2025 International Scientific and Art Committee, Lab2PT, EAAD,
University of Minho, Portugal**

Filipa Martins de Abreu

University of Saint Joseph in Macau, China

Some of the contributions contained in this volume were created in part using AI-based tools, e.g. for text generation. Authors are responsible for ensuring compliance with ethical guidelines and copyright laws.

ARTECH 2025 Organisation

Organising Committee

Institutions

- University of Minho / Communication and Society Research Centre (CECS)
- The Artech-International Association

Artech Steering Committee

- Adérito Fernandes-Marcos, University of Saint Joseph in Macao (MO) (Chairman)
- Álvaro Barbosa, University of Saint Joseph in Macao (MO)
- Christa Sommerer, University of Art and Industrial Design (AT)
- Henrique Silva, Cerveira Biennial of Arts (PT)
- Lola Dopico Arneiros, University of Vigo (ES)
- Nuno Correia, Nova Lisbon University (PT)
- Seamus Ross, University of Toronto (CA)
- Mirian Tavares, University of Algarve (PT)

Honorary Chair

- Adérito Fernandes-Marcos, University of Saint Joseph in Macao (MO) / Artech-International

Conference Chairs

- Alberto Sá, University of Minho / CECS (General Chairman)
- Madalena Oliveira, University of Minho / CECS (General Co-chairman)
- Daniel Brandão, University of Minho / CECS (PT) (Local Organisation Chairman)

Publication Chair and Editor of the Digital Proceedings (ACM/Zenodo)

- Lucas Fabian Olivero, Research Centre in Arts and Communication (CIAC), Portuguese Open University and Algarve University, Portugal

Editors of the Printed Book of Proceedings

- Lucas Fabian Olivero, CIAC, Portuguese Open University and Algarve University, Portugal
- Emília Simão, Portucalense University (PT)
- Alberto Sá, University of Minho (PT)
- Adérito Fernandes-Marcos, University of Saint Joseph in Macao (MO)

Curatorship of Artworks Chairs

- Pedro Alves da Veiga, Portuguese Open University (PT)
- Luis Fernandes, gnration / University of Minho / CECS (PT)

Web and Social Media Network Chairs

- João Martinho Moura, University of Minho (PT)
- Selma Pereira, ISMAT- Ensino Lusófona (PT)
- Emília Simão, Portucalense University (PT)
- Bruno Mesquita, Universidade do Minho, CECS (PT)

International Scientific and Art Committee

- Susana Gaudêncio, University of Minho / EAAD (President)
- Filipa Martins, University of Saint Joseph in Macao (MO) (Vice-President)
- João Martinho Moura, University of Minho / CECS (PT) (Vice-President)
- Pedro Alves da Veiga, Portuguese Open University (PT) (Vice-President)

Committee Members

- Adérito Fernandes-Marcos, University of Saint Joseph in Macao (MO)
- Alberto Sá, University of Minho (PT)
- Aleksei Lipovka, Federal University of Siberia (RU)
- Alicia González-Pérez, University of Extremadura (ES)
- Amílcar Cardoso, University of Coimbra (PT)
- Ana Amélia Carvalho, University of Coimbra (PT)
- Ana Gago, Universidade Católica Portuguesa (PT)
- Anamaria Rezende Galeotti, Anhembi Morumbi University (BR)
- André Baltazar, Universidade Católica Portuguesa (PT)
- André Wilson Salgado, Federal Institute of Amazonas (BR)
- Anthony Lewis Brooks, University of Aalborg (DK)
- António Carvalho Maneira, University of Saint Joseph in Macao (MO)
- António Costa Valente, University of Algarve (PT)
- Áurea Muñoz del Amo, University of Sevilla (ES)
- Benjamin Falchuk, Perspecta Labs (EUA)
- Bruno Mendes da Silva, University of Algarve (PT)

- Carlos Sena Caires, University of Saint Joseph in Macau (MO)
- Cecília de Lima, University of Lisbon (PT)
- Célio Conceição, University of Algarve (PT)
- Cleomar Rocha, Federal University of Goiás (BR)
- Clara Trigo, Federal University of Bahia (BR)
- Cristina Sá, Universidade Católica Portuguesa – Porto (PT)
- Daniel Brandão, University of Minho (PT)
- David Farinha, University of Saint Joseph in Macao (MO)
- David Mould, Carleton University (CA)
- Denis Zuev, University of Saint Joseph in Macao (MO)
- Dorotea Souza Bastos, Federal University of Recôncavo da Bahia (BR)
- Diogo Marques, University of Coimbra (PT)
- Eduardo Lima, Federal University of São João del-Rei (BR)
- Emília Simão, Portucalense University (PT)
- Gabriela Borges, Federal University of Juiz de Fora (BR)
- Gavin Perin, University of Technology Sydney (AU)
- Gerald Estadieu, University of Saint Joseph in Macau (MO)
- Gilberto Prado, University of São Paulo (BR)
- Gilvano Dalagna, University of Aveiro (PT)
- Heitor Alvelos, University of Porto (PT)
- Helena Barranha, Nova University of Lisbon (PT)
- Henrique Portovedo, University of Aveiro (PT)
- Hernando Urrutia, Portucalense University (PT)
- Hosana Celeste Oliveira, Paulista State University (BR)
- Inês Guerra Santos, University Institute of Maia (PT)
- Ionat Zurr, University of Western Australia (AU)
- Isabel Azevedo, University of Porto (PT)
- Isabel Cristina Carvalho, Portuguese Open University (PT)
- Isabel Soveral, University of Aveiro (PT)
- Ivan Franco, McGill University (CA)
- Joana Pestana, University of Kingston (UK)
- João Cordeiro, University of West London (UK)
- João Paulo Queiroz, University of Lisbon (PT)
- Jorge Carrega, University of Algarve (PT)
- José Alberto Gomes, Universidade Católica Portuguesa (PT)
- José Bidarra, Portuguese Open University (PT)
- José Carlos Neves, CICANT, Lusófona University (PT)
- José Gomes Pinto, CICANT, Lusófona University (PT)
- José Pereira, Polytechnic Institute of Viseu (PT)
- Leonel Morgado, Portuguese Open University (PT)
- Lucas Fabian Olivero, Portuguese Open University (PT)
- Lucia Pimentel, Federal University of Minas Gerais (BR)
- Lucia Santaella, Pontifical Catholic University of São Paulo (BR)
- Ludmila Pimentel, Federal University of Bahia (BR)
- Luís Teixeira, Universidade Católica de Portugal (PT)
- Madalena Oliveira, University of Minho (PT)
- Marcos Mortensen Steagall, Auckland University of Technology (NZ)
- Marcos Mucheroni, University of São Paulo (BR)
- Maria Amélia Bulhões, Federal University of Rio Grande do Sul (BR)
- Maria De Lambert, Polytechnic Institute of Porto (PT)
- Maria Manuela Lopes, Polytechnic Institute of Porto (PT)
- Masood Masoodian, University of Aalto (FI)
- Martsamrit Pasupa, King Mongkut’s University of Technology Thonburi (TH)
- Miguel Carvalhais, University of Porto (PT)
- Milton Sogabe, Anhembi Morumbi University (BR)
- Mirian Tavares, University of Algarve (PT)
- Mirtes Marins de Oliveira, Anhembi Morumbi University (BR)
- Mónica Mendes, University of Lisbon (PT)
- Né Barros, Balleateatro, Balleateatro, ESAD – School of Arts and Design (PT)
- Nelson Zagalo, University of Aveiro (PT)
- Noeli Batista dos Santos, Federal University of Goiás (BR)
- Nuno Correia, Nova University of Lisbon (PT)
- Nuno Martins, Polytechnic Institute of Cávado and Ave (PT)
- Óscar Mealha, University of Aveiro (PT)
- Pablo Gobira, Federal University of Minas Gerais (BR)
- Paulo Bernardino Bastos, University of Aveiro (PT)
- Paulo Ferreira-Lopes, University of Applied Sciences Mainz (DE)
- Paulo Teles, State University of Campinas (BR)
- Patrícia Gouveia, University of Lisboa (PT)
- Pedro Andrade, Universidade do Minho (PT)
- Pedro Cabral Santo, University of Algarve (PT)
- Pedro Pais Correia, CIAC, University of Algarve (PT)
- Penousal Machado, University of Coimbra (PT)
- Priscila Arantes, Anhembi Morumbi University (BR)
- Ralf Doerner, Rhein-Main University of Applied Sciences (DE)
- Regilene Sarzi Ribeiro, São Paulo State University (BR)

- Ricardo Alexino Ferreira, University of São Paulo (BR)
- Rosana H. Monteiro, Universidade Federal de Goiás (BR)
- Rosangella Leote, Universidade Estadual Paulista (BR)
- Rui Travasso, Polytechnic Institute of Beja (PT)
- Sandra Ng, University of Saint Joseph in Macao (MO)
- Selma Pereira, ISMAT- Ensino Lusófona (PT)
- Sérgio Eliseu, University of Aveiro (PT)
- Sílvia Leiria Viegas, University of Algarve (PT)
- Sol Alonso Romera, University of Vigo (ES)
- Suzete Venturelli, University Anhembi Morumbi (BR)
- Teresa Barradas, Polytechnic Institute of Beja (PT)
- Thuy Anh, University of Economics Ho Chi Minh City (VN)
- Tiago Cruz, University Institute of Maia (PT)
- Victoria Vesna, University of California in Los Angeles (USA)
- Vítor Sá, Polytechnic University of Porto (PT)

Table of Contents

SESSION 1: GENERATIVE VISIONS: AI, REPRESENTATION, AND VISUAL SYSTEMS

Detailed Abstract Images from Automated PromptsArticle 1

Adon Phillips, David Mould

Representational Model Guided by AI Algorithmic Logic Procedures¹

Silvia Laurentiz

Abstract Language Model – Exploring the Human Machine Relation by using Artificial Neural Networks as a Tool for Creating Audio-visual ArtworksArticle 2

Andreas Lutz

Lisbon MIL City within the A.I. Age: Interpreting Media Arts and Urban Heritage for Sociological Tourism and their Dissemination via a Digital Marketing CampaignArticle 3

Pedro Andrade

The Ancestors of AI in the Era of the Floating World: Images, Atlases, Archives of Critical Thinking (contributions)Article 4

Maria de Fátima Lambert

Aura-Fox Redux: uma arqueologia da imagem técnica: Aura-Fox Redux: a technical image archaeologyArticle 5

Camila Mangueira, João Lima (Limamil)

SESSION 2: IMMERSION AND DIGITAL NARRATIVE: WEB, VIDEO ART, GAMES, AR/VR

Co-creation and Personalisation of Immersive Web Environments: Initial Results from a Case StudyArticle 6

Bárbara Gaspar Cleto

Subjective Views: Video Art as a Mirror of Culture and Artistic Performance Olhares Subjetivos: A Videoarte como Espelho da Cultura e da Performance ArtísticaArticle 7

Pedro Henriques, Pedro Alves da Veiga

Videogame as Emotional Mediation: an Interactive Installation in Media ArtsArticle 8

Emanuele Souza Inácio, Tiago Martins, Alberto Teixeira Sá

¹ Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18771296>

Memórias do Futuro - Um Diálogo com o Passado Sustentável: Memories of the Future - A Dialogue with the Sustainable PastArticle 9
Miguel Carlos Lima, Mirian Nogueira Tavares, Luís Teixeira

Narrative Portals and Augmented Reality: Activating Empathy in Creative Projects..... Article 10
Ana Raquel Gouveia, Isabel Cristina Carvalho, Paulo Maldonado

Unblackboxing como prática artística Unblackboxing as an Artistic Practice: Unblackboxing as an artistic practice..... Article 11
Guilherme Maranhão

A Media Art como meio de criação híbrida, colaborativa e participativa Media Art as a means of hybrid, collaborative and participatory creation: Media Art as a means of hybrid collaborative and participatory creation Article 12
Carlos Alves Correia

SESSION 3: AI, AUTHORSHIP, HISTORIES

Media Art and AI. Collaborative projects and moving images²
Regilene A. Sarzi-Ribeiro

Aesthetics on Autopilot: AI's Role in the Works of Abrantes and Manovich..... Article 13
Catarina Lira Pereira, Domingos Loureiro, Diana Costa

Toward Diffused Multiplicity: Palimpsestic Characteristics in AI Art..... Article 14
Youngjun Choi, Jinjoon Lee

Remember to [not] be Forgotten: Women Artists and Technological Memory Erasure: A Feminist and Posthuman Critique of Algorithmic Exclusion..... Article 15
Conceição Luís, Patrícia Gouveia, Manuel Lisboa

Core Reflex II: The Creative Process of a Self-Portrait in a Luminous Landscape Article 16
Bruno Mendes da Silva, Susana Costa

A Relational (Re)Turn: Revisit Interactive Art through Interaction and Aesthetics..... Article 17
Aven-Le Zhou

SESSION 4: IMMERSIVE XR: THEORY AND FRAMEWORKS

A Framework for Analyzing XR Media Art through Impossible Spaces and Interaction Structures Article 18
Jaeyeon Shin, Dageom Chung, Sun Ah Bae, Seung Hyun Cha

² Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18701490>

Strategic Design Framework for Surrealistic Spaces in Virtual Reality..... Article 19
Jisoo Kang, Dageyeom Chung, Kyunghyun Cho, Seung Hyun Cha

SOCIAL RAFT – Effects of a Multisensory VR Journey Through the Perception of Social Isolation Article 20
Paulo Veloso Gomes, João Donga, Vítor Sá, Henrique Curado, António Marques, Gonçalo Oliveira, Sofia Sá

Na senda das dimensões da média-arte digital nas narrativas biográficas em Macau: uma perspetiva à luz da diversidade cultural: On the Trail of Digital Media Art Dimensions in Biographical Narratives in Macau: A Perspective in Light of Cultural Diversity..... Article 21
Selma Pereira, Adérito Fernandes Marcos, Ricardo Alexino Ferreira

Revitalising Macau Old Protestant Cemetery with Engaging Interactive Design for Cultural Preservation³
Hio Ieng Lau, Filipa Martins de Abreu

Saint Joseph the Worker Church: AI-Enhanced 3D Digitisation and VR: A Case Study in AI-Enhanced 3D Digitisation and Virtual Reality⁴
Sandra Olga Ng Ka Man, Kingsley Zijun Liang, Carlos Sena Caires

The Platypuses of Art: Unclassifiable Practices and a Media Archive in Chile⁵
Valentina Montero

SESSION 5: INTERACTIVE SYSTEMS AND TANGIBLE INTERFACES

SOMA: Interactive Dynamic Calligraphy and Poetic Sceneries Article 22
Haoxuan Wang, Zirui Wu, Kang Zhang

Controlling Chair: Experiencing User Autonomy versus Automation through an Interactive Artifact..... Article 23
Sara Mlakar, Kathrin Probst, Astrid Weiss

Bodies in Dialogue: Generative AI as a Provocateur for Narrative and Motion..... Article 24
Michael Morran, Jinsil Hwaryoung Seo

Rob2embrace Enchancing Multicultural Behaviour through Robot Activities with children in Education..... Article 25
Francisco Miguel Vargas Cárdenas, Rocío García Robles

Why Open Small AI Models Matter for Interactive Art..... Article 26
Mar Canet Sola, Varvara Guljajeva

³ Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18807878>

⁴ Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18721449>

⁵ Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18774256>

**Cosmic Echoes: Interdimensional Ensemble Systems and Pulsar
Acousto-Optical Translation** Article 27
Yiwen Zhang, Ailei Wang, Xinru Sui, Yeojin Kim, Zhiyong Fu

**The Eye of the Sun — A Touch and Motion-sensitive, Interactive, Audio-visual
Sculpture Combining Curiosity and Solar Physics** Article 28
*Tim Schneider, Gérard Kubryk, Vincent Hulot, Matthieu Courgeon, David Poirier-Quinot, Frédéric Auchère,
Frédéric Baudin, Eric Buchlin, Xavier Maître*

SESSION 6: IMMERSIVE STAGES AND PERFORMATIVE SPACES

**The Loop — A 360-degree Immersive and Interactive Stage for Collective
Space-time Experiences** Article 29
*Béatrice Albert, Emmanuelle Frenoux, Gaële Misiak, Gérard Kubryk, Guillaume Junot, Izabela Faguet,
Matthieu Courgeon, Michèle Gouiffès, Nicola Lorè, Sami Korhonen, Simon Junot, Tim Schneider,
Vincent Hulot, Xavier Maître*

Performance in Audiovisual and Multimedia: Fixed and Dynamic Systems..... Article 30
Rui Travasso

**El amor que pasa. Resignifying Monumentality and Gendered Violence
through Transmedia practices**..... Article 31
Julia Domínguez Sánchez-Lanuza, Patrícia Gouveia

Akousis: An AI-Driven Sonification of Botanical Taxonomy Article 32
Roopesh Sitharan, Anis Haron

**Processed Experience: A Contemporary Discourse on Existence with
Spatial Installation** Article 33
Hyeokjin Choi, Seung Hyun Cha

Space as Interface Article 34
Patrick Kruse, Ivana Druzetic-Vogel, Christian Geiger

Virtual Reality in the Expanded Field..... Article 35
Byeongwon Ha

SESSION 7: DIGITAL STORYTELLING, ARCHIVES, PRESERVATION

zeitgeist25/I_miss_you_but_i_was_never_here.html: A Contemporary Story..... Article 36
Rui Filipe Antunes

CONFINEMENT ARCHIVE: Virtual Testimonies of Confinement through Contemporary Art Practices and Challenges in its Preservation..... Article 37
Guillermo Rodríguez Tenorio, María Arregui Montero, Rocío García-Robles

From Concept to Video: An End-to-End AI-Assisted Approach for Storytelling.... Article 38
Wenxiao Zhu, Yian Tang, Chelsea-Xi Chen, Aven-Le Zhou

Helping Intangible Heritage Resilience through Storytelling (HIGHRES): Research Projects in Heritage and Digital Arts within the European Framework of the Erasmus+ Programme..... Article 39
Pedro Ernesto Moreno García, Marta Villanueva Padilla, María Isabel Moreno Montoro

The Filter Market: A Speculative Interface for Buying and Performing Civility in Online Comments..... Article 40
Rúben Duarte, Maria João Antunes, Catarina Lelis

SESSION 8: MEDIA ECOLOGIES, SUSTAINABILITY, PARTICIPATION

Digital Masks: Reimagining Digital Media for Co-Presence with the Kogi Article 41
Jaroslava Šnajberková, José Bidarra, Mirian Nogueira Tavares

Perturbatio — An Artistic Framework for the Visualisation of the Cumulative Eco-impact of Human Activities Article 42
Tim Schneider, Charles Ménard-Wendling

Osmosis Among Art, Sealife and Citizen-Science: Promoting Sustainability through Sci-Art Participatory Experiences Article 43
Rocío García Robles, Nicolás Pérez Rodríguez

From the Atelier Populaire to Artivism. Situationist Strategies Reimagined Article 44
Maria Cristina Cavalcanti, Mirian Estela Nogueira Tavares, Priscila Almeida Cunha Arantes

AFASTAR E APROXIMAR: Narrativa audiovisual sobre a (re)conexão entre o Homem e a Natureza. Presença entre imagem, som e natureza: ZOOM OUT and ZOOM IN: An Audiovisual Narrative on the (re)connection between Humans and Nature. Presence between Image Sound and Nature...... Article 45
Sara Cruz, José Bidarra

SESSION 9: TERRITORIES, MEMORY, CARTOGRAPHIES

Haunted Aurora: Hauntological Experience through Miniaturization of Media-Mediated Nature Article 46

Sungbaek Kim, Yasuaki Kakehi

Glitch Cartographies: Reconfiguring Memory and Territory in Virtual Reality Article 47

Fernando Carvalho, Mónica Mendes

Beyond Technology: Proposing A Contextual Classification Framework for Media Art in Chinese Urban Space Through Its Social Potential Article 48

Shujiao Xie

Between Light and Screen in David Hockney: the Rearticulation of the Pictorial Gesture in Digital Media Article 49

Gabriel José Marques Colaço, António De Oriol Pena Vazao E Trindade, Diana Godinho da Silva Costa

Towards Relationality: Sociocultural Embodiment and Interpersonal Interaction Article 50

Aven-Le Zhou

SESSION 10: INTERFACES OF PLAY: GAMES, PUPPETRY, AND CRITICAL DESIGN

Glich Art based on Digital Games Article 51

Noriki Amano

Experimental Machinimas: Avant-Garde and Hacktivism Article 52

Ejla Kovacevic

**Machinima Artivista como Crítica Social: O Caso de “City Art – Mimo e a Cidade”
Machinima Artivism as Social Criticism: The Case of** Article 53

Miguel Carlos Lima, Mirian Nogueira Tavares, Luís Teixeira

Autonomous Puppetry - A Preliminary Study on the Puppeteer’s Perspectives of Autonomy in Puppetry Practices Article 54

Miguel Albuquerque Araujo, Luís Leite, Rui Rodrigues

Drawing, Painting, Modelling, Mobile Phones and Video in Anamorphic Construction: Analogue and Digital Processes in the Metamorphosis of Certain Artistic Forms Article 55

António Oriol Trindade

SESSION 11: AI, GENERATIVITY, PRACTICE

The Plasticity of Generative Artificial Intelligence in Materialized Artistic Practice. Case Study ‘in/visibilidades no feminino 2.0’ Article 56

Célia Fernandes Palma, Isabel Cristina Carvalho, Mirian Nogueira Tavares

Practicing The Weird Third Thing: A Participatory Methodology for Machine Unlearning through Playful Subversion	Article 57
<i>Dominika Čupková</i>	
Deus in Machina: A Conversational AI for Spiritual Experience	Article 58
<i>Philipp Haslbauer, Carolin Reichherzer, Marco Schmid, Aljosa Smolic</i>	
Whale Echo Dialogues: Simulating Acoustic Encounters Between Whales, Humans, and Machines	Article 59
<i>Yu-Chia Kuo, Tak-Cheung Hui</i>	
Rainbow Clash: Cyberperformance as an Interactive Artistic Experience	Article 60
<i>Rosimária Sapucaia, Rúben Ferreira, Vasco Yang Ye, Rodrigo Meireles, Guilherme Cerqueira, Fernando Faria Paulino</i>	
Designing Awe in Interactive Digital Media	Article 61
<i>Assim Kalouaz, Brendan Rooney, Jean-François Jégo, Pamela Gallagher</i>	

SESSION 12: AI, DANCE, EMBODIMENT

Understanding the Use of AI in Contemporary Dance: Perspectives from Practitioners	Article 62
<i>Nuno N. Correia, William Primett</i>	
Designing for Kinaesthetic Empathy using Data-Driven Movement Matching	Article 63
<i>William Primett, Nuno N. Correia, Naoto Hieda, Andreia Matos</i>	
AVLMA: Laban Movement Analysis as Catalyst for Generative Art in an Experimental Audiovisual Pipeline Using MediaPipe	Article 64
<i>Rui Filipe Antunes, Cecília de Lima</i>	
Liminal Landscapes Generative Art as a Technoshanic Instrument in the Representation of Altered States of Consciousness	Article 65
<i>Emília Simão, João Martinho Moura, Daniel Brandão</i>	
Immersive Meditation as Neuro-Art: Designing Sensorium’s Dome at the Intersection of HCI and Neuroaesthetics	Article 66
<i>Mark Nazemi</i>	
Interwoven Realities: Exploring the Confluence of Embroidery and Biomaterials in Contemporary Art	Article 67
<i>Gabriela Farías Islas</i>	

⁶ Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18710458>

⁷ Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18762451>

SESSION 13: AUDIO-VISUAL, MUSIC, PERFORMANCE, MEDIA

BeComposer: A Computer System for Musical Composition and Performance in Real-Time..... Article 68

Emídio Buchinho

Institute of Hyper-Consumption: Traces of Excess..... Article 69

Fernando Carvalho, Ana Mariz, Kim da Motta, Diogo Aguiar, Patrícia Gouveia

Technodiversity, performance, and technical mediation in four creative projects exploring interactive and visual resources⁶

José Henrique Padovani, Caio Costa Campos

Digital Weight: The Invisible Environmental Cost of Our Online Lives⁷

Jekaterina Kaizere

SESSION 14: ETHICS, SURVEILLANCE, MEMORY

Espionage and Dataveillance Technologies: Perspectives on Sound Surveillance in Surveillance Art Practices..... Article 70

Lorena Ferreira Alves

Reframing Surveillance: Generative AI and the Fictionalization of Machine Vision Article 71

Xuanyang Huang, Xiaoyun Zhong, Wei Huang, David Keiman Yip

Inclusive Soundscapes: Systems for an Accessible Performance Article 72

Rui Travasso, André Conde, Marco Miranda

Protocol as Poetry: A Case Study of Pak's Smart Contract-Based Protocol Art..... Article 73

Botao Amber Hu

Mycortex: Exploring Non-Human Symbolic Communication through Art and Bioelectric Signals Mycortex: Non-Human Symbolic Communication Article 74

Zhiqi Wang, Patrick Gunawan Hartono

SESSION 15: DIGITAL STORYWORLDS, SEMIOTICS AND NARRATIVE DESIGN

From Motion to Meaning: Educational and Design Perspectives on Embodied Locomotion in Virtual Reality..... Article 75

Michael Bruner, Jinsil Hwaryoung Seo

Digital Media Art and Archaeologies of the Invisible: The Case of Mãe Soberana in Dialogue with Zielinski..... Article 76

Andreia Isabel Mendonça, Ana Soares, Maria Guerriero

⁶ Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18710458>

⁷ Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18762451>

Semiotic Sculpting: Modeling and Meaning-Making with Second-Order Semiology Article 77
Yuchen Li, Aven-Le Zhou

The Mouth and You: A Walk Through Beckett’s Not I in Virtual Reality Article 78
Syeda Nikhat Mohsin, Néill O’Dwyer, Nicholas Johnson

AI.R Taletorium: Preserving Culture Through AI Storytelling Article 79
Predrag Nikolic

SESSION 16: HCI, INTERACTION DESIGN, THEORY

Affordances of Behavior for Interactive Digital Narratives: A Poetics for Interaction Article 80
Ana Catarina Monteiro, Miguel Carvalhais, Rui Torres

EDNI. Rehearsing the Embodied Co-Creation of Emerging Trans-Spatio-Temporalities Article 81
Helena Pires, Né Barros, João Martinho Moura

Eros, Constructor of Identities: An Object based Videotaping Project Article 82
Shaula Ortega Rodríguez

Three Languages of Artistic Research – Precious Multitudes as a Performative Documentation of Research in New Media Art Article 83
Charlotte Triebus, Christian Geiger

SESSION 17: DATA, VISUALIZATION, WEB, PARAMETRIC

Fav(panopt)icon Project Article 84
Byeongwon Ha

“UrdiSynth42” e a tecelagem figital: “UrdiSynth42” and Figital Weaving Article 85
Nelson Caldeira, Pedro Alves Veiga, João Cordeiro

Make America Great Again and Again: Voices Across the World Article 86
Byeongwon Ha

From Sunlight to Qubits: Visualizing Analogies between Photosynthesis and Quantum Information Systems Article 87
Fernando Codevilla, Juliana Vizzotto

SESSION 18: NATURE, SUSTAINABILITY, HUMAN–NATURE RELATIONS

- From Synergy to Method: A Case Study of Transdisciplinary SciArt Practices Between Art and Neuroscience** Article 88
Rocío García Robles, Nicolás Pérez Rodríguez
- The Ironic Machines: Computational Generation of Audiovisual Irony** Article 89
Jorge Forero Rodríguez, Gilberto Bernardes de Almeida, Mónica Mendes
- 3DAroma: Spice-oil-saturated Tangible Installation with Auditory Interaction as Embodied Reminiscence of Exploring Nomadic Memory and Identity** Article 90
Joshua Nijati Alimujiang, Jacques Ziyu Wang, James Pei Man She, David Yip
- Aquaterrestrial Recolonization: Mission Borneo** Article 91
Predrag Nikolic
- Searching for the Everywhen on the Basis of the Findings of the Artistic Research Project skin flats⁸**
Alexandra Reill
- Washing My Hands** Article 92
Byeongwon Ha

ARTISTIC EXHIBITION: GNRATION, BLACKBOX ROOM

- SOCIAL RAFT - System Design and Conceptual Framework of a VR-Based Artwork Exploring the Experience of Social Isolation** Article 93
Paulo Veloso Gomes, João Donga, Vítor Sá, Henrique Curado, António Marques, Gonçalo Oliveira, Sofia Sá
- Playing with Joy** Article 94
Eduardo da Silva Brito
- Empatia Líquida - diálogo íntimo entre humano e máquina que se traduz em sons e padrões cimáticos: Liquid Empathy - Intimate Dialogue between Human and Machine that Translates into Sounds and Cymatics** Article 95
Joana Isabel Perfeito
- Ágora Fluida - Instalação Interativa que convida à colaboração: Ágora Fluida - Interactive Installation that Invites Collaboration** Article 96
Joana Isabel Perfeito
- Pathological Landscapes: An Artistic Journey into AI's Compassionate Language and Imagery in Healthcare** Article 97
Ziyao Lin

⁸ Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18726597>

Dancing Landscapes, Volcanic Breath⁹: An artist's take on moving with a volcano

Simona Žemaitytė

Small Laboratory to Recreate Humans | Interactive Installation on Affective Archives and Algorithmic Fictions Article 98

Líria Varne

A Needle in a Haystack..... Article 99

Varvara Guljajeva, Mar Canet Sola

What the Salt Crystals Knew: Desert, Extraction, and Poetic Knowledge¹⁰

Alejandro Borsani

Memory, Montage, and Counter-narratives: A Digital Media Installation..... Article 100

Maria Cristina Cavalcanti

Desabafo..... Article 101

Lorena Ferreira Alves

⁹ Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18694891>

¹⁰ Published at Zenodo.org: <https://doi.org/10.5281/zenodo.18710833>

Keynote Speakers

Paulo Teles

media artist, professor, researcher

Professor at the Department of Multimedia, Film and Communication of the Institute of Arts of the State University of Campinas. His artistic works seek to converge technology, new sensibilities and critical thinking through by interactive-corporal processes in emerging media, relational and multi-sensorial artistic expressiveness, and transdisciplinarity literacies through Art.

“Artistic [co]Creative Procedures in Masterpieces. from new Technological Sensitivities to the Multidimensional Sharing Literacies”

Based on artistic and intellectual production that investigates the interfaces between art, technology, and knowledge, this is an analytical and practical trajectory anchored in the author’s artistic and educational production, which evolves from the search for new sensibilities in the field of Technological Art to the articulation of sharing literacies.

We will explore how the systemic vision of procedural art has expanded into action research in shared multimedia creative processes, as well as how this has highlighted cultural and critical diversity in procedures for the co-creation of contemporary collective works based on the multiplication of creative and critical agents in the context of a multicultural and diverse technological society.

/

Sara Orsi

web designer, creative coder, researcher, educator

Sara Orsi is focused on the intersection of digital technology and contemporary culture. Currently she teaches at the School of Innovation and Creation Technologies (ETIC) and at the Faculty of Fine Arts of the University of Lisbon (FBAUL).

“On Cultural–Technological Ambivalences: A Dialogue Between Theoretical and Artistic Practices”

Drawing on multiple ambivalences that emerge from the cultural–technological interrelation, this presentation reflects, through a dialogue between theoretical and artistic practices, on how algorithmic entities and digital infrastructures have been shaping relations of power, visibility, and temporality.

Anchored in the concept of pharmakon – simultaneously a remedy or poison, but also a potion or spell – and in the ambivalences identified, a trajectory is traced around three main axes: power relations in algorithmic governance; the visible and invisible within digital infrastructures; and the paradoxical temporality of computing. technology on contemporary culture.

/

Miguel Carvalhais

designer, musician, artist

Professor of Design at the Faculty of Fine Arts of the University of Porto, and its current dean. Author of the books *Art and Computation* (2022) and *Artificial Aesthetics: Creative Practices in Computational Art and Design* (2016).

“From Analogue to Metaphor: Art in the Computational Turn”

In this talk I will look at computational technologies and at how they breed tools and media that are quite unlike any of those that we have historically used to create art. I will delve into the relationships between art and media in the post-digital and post-internet condition and, by focusing on the computational nature of these media I will argue that because of their inherent instability and irreducibility, computational media are at odds with our expectations from media forms, while simultaneously opening up radically new spaces for artistic expression and experience, for an art of causality, complexity, emergence, and intensity.