THE DIGITAL REALM
-A PRACTICAL GUIDE TO DIGITAL TOOLS IN PERFORMING ARTS

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DIGITALONSTAGE

Cover photo made by the graphic designer Andrea Valbonetti and AI.

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INTRODUCTION TO DIGITAL ON STAGE
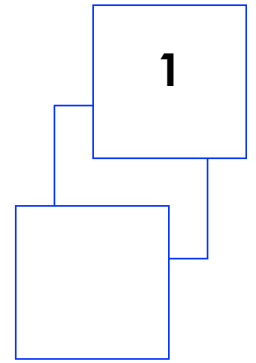
Where the stage comes to you - virtually!

This Guidebook is part of the Digital On Stage (DOS) project - A 3-year initiative involving artists, production houses, digital developers and culture experts from all corners of Europe. Our goal is to innovate the performing arts sector across Europe by promoting digital performances and supporting artists and stagehouses in adopting new technologies.

The Covid Pandemic altered the performing arts sector as a whole, causing many artists to turn to new techniques to support their work and stay connected to their audiences. These techniques range from Virtual Reality, Augmented Reality and Artificial Intelligence to increased use of streaming platforms, robots and drones. DOS envisages a series of activities aimed at upskilling the representatives of the performing arts sector, including workshops, artistic residencies and mobility activities, and supporting small stage productions.

Digital On Stage project members:

INTERCULT

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THE CUBE
Entrepreneurship Support & Education

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PURPOSE OF THIS GUIDEBOOK

Desk research and surveys

The purpose of this Guidebook is to provide a comprehensive entry into the world of digital tools in performing arts. It identifies existing good practices and guidelines for technology integration in performing arts and presents them through short reports.

The Guidebook collects 120 inspiring and current examples from performing arts sector representatives. These have been collected through a variety of methods. Desk research was conducted by each partner to exploit our knowledge of the stage art sector in different European regions. In addition, surveys were sent out to performing arts representatives, asking them to describe their practices in words of their own. The survey results and desk research findings form the bulk of the Guidebook.

How do we define performing arts and digital tools?
By *Peter Tomaž Dobrila, KIBLA*

History

Performing arts have used digital tools since they have been available. In the 1950's computers were used in avantgarde music as a composing tool and to generate digital audio waveforms on performances. Digital technology have been following the evolution of modern art through the 60's and 70's, although it has been an exlusive than inclusive tool due to its high cost and complexity.

In the 1980's digital equipment became more accessible and available. Performers were implementing real-time online transmissions between different cities in different states via available networks, charged with the information processed by computers. Interactivity became one of the main issues, like using computer programmed interface for sound, vision or computer controlled robotic extension on your body, or trying to manipulate a robot.

In the 21st century, the connected world was flooded with digital technologies and their possibilities. More powerful computers were supporting better graphic cards and thus better images. Mobile devices are probably the most common auxiliaries on the globe and Augmented Reality artworks (AR) have seen their beginning of use. Headsets for Virtual Reality (VR) and various other 'glasses' for either 3D visuals and films opened new possibilities in artistic expression. Artificial Intelligence (AI) adds to the long-running debate about technology and arts.

Definition

Digital performance can be defined as any kind of performance involving digital technologies in its execution. Primarily in the production realisation, rather than its pre- or post production phase. Below is our attempt to categorise digital tools in performing arts:

1. **Audiovisual digital performances** are those projecting computer animations as imagery and/or use digital sound interfaces, modules and instruments to enhance the overall effect.

2. **Interactive performances** are used to implement different interactivities. They can be divided in three main categories according to interaction possibilities:
- Performer to machine:
Performer to machine interactions contain performers interacting on stage with image, light, sound, scenography etc.
- Machine to machine:
As technology develops, artists have come to involve machine interaction as an added dimension to their performances. Machines communicate amongst themselves, while machine actions are usually pre-programmed into certain algorithm(s) or left to randomly generated movements.
-Performer and/or audience to machine (offline and/or online):
Many combinations of interaction between human and machines can be inroduced, when machines interact within themselves and are responsive to a performer and even triggered by audience participation– in the room as on-line interaction on composition, sounds and vision through mobile devices, i.e. phones., therefore mutual, multilayered interactions are intertwined between performer(s), technologies and audiences.

3. **Extended bodies and robotic performances** are introducing physical possibilities of digital technologies being either an added parts on the obsolete body or a preprogrammed or/and interactive robots, which are different in their appearance.

4. Some artworks may involve **Augmented Reality (AR)** performances through applications for audience participation and an augmented performance experience.

5. **Virtual Reality (VR)** performances offer VR gear as headsets and–less possibly–controllers for the audience for 360 degrees vision and/or sound.

6. **Artificial Intelligence (AI)** performances are introducing AI to be involved in any part of the working and performing process artists wish to use the AI tools.

7. **Digital mediums** like TV or internet shows, including interactions and digital gadgets, hardware and software tools, and games.

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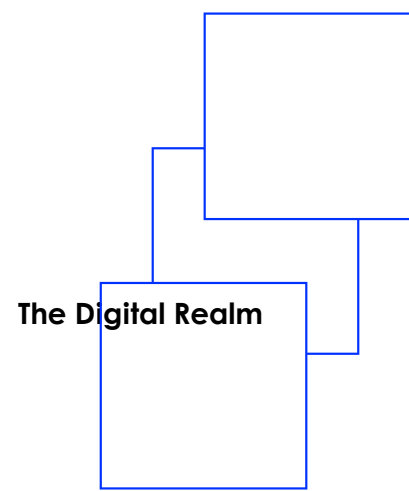
A BRIEF OVERVIEW OF DIGITAL TOOLS IN THE PERFORMING ARTS

Sweden

Digitalization has taken root in Swedish visual arts and music, but it's safe to say that it's met with greater caution in the performing arts. Technologies such as VR and AI are often seen as a threat to traditional artistic methods. Swedish cultural reviews tend to assume that digitalization is equal to filming stage performances. It is clear that greater funding is needed as well as a curious approach from the artists themselves. For digital tools to add value, there needs to be a shift towards treating them as supportive elements, ensuring artists can work with technology on their own terms.(1)

Despite this general hesitation, there are Swedish artists out there who are paving the way. Through his dance group "Lost in Time", the VR-director Robin Jonsson exemplifies current uses of digital tools in performing arts. By blending dance with digital tools like VR and MR, the group offers an interactive experience that illustrates the potential of technology to support innovative artistic expression in the Swedish performing arts.

Slovenia

Digital tools have been implemented in Slovenian visual arts since the 1960's, while digital performances arose in the 90's with various acts incorporating digital components into their works, from interactions to sensors and brain-computer interfaces controlling the story, or fundamental real-time on-line transmissions of shows. In the early 21st century more complex digital performances using motion capture systems with real-time graphic and audio responsive ambients and mixed reality environment was introduced as participative events involving the audience as performers. In the recent years different kinds of new technologies have been set in various (mainly dance) performances incorporating VR and robotics and interactivity with possible audience involvement or combining analog and digital media into some kind of intertwined reality of directing the script and changing of scenography. Some artistic experiments are also done with AI.

(1) *Tekniken måste sättas i konstnärernas händer (ur nummer 2-3/2021), Teatertidningen.* https://teatertidningen.se/?p=2526

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Belgium

The cultural sector in Belgium faced many challenges during the COVID pandemic. Now, the audience has returned and it is time to look forwards to the role of digital tools in the future of performing arts.

Several cultural centres are taking the lead in this, often through the organisation of festivals, such as the For Real festival in De Grote Post in Ostend or the Festival Digital of the Kopergietery in Ghent. Other cultural organisations, such as the performing arts centre 30CC in Leuven, are looking for a way to provide makers with suitable material and knowledge and offer them places to create and show new digital work.

In 2022, the Department of Culture, Youth & Media of the Flemish government created a vision paper 'Towards an effective cultural sector in digital times'. Simultaneously, government-subsidised organisations such as Cultuurconnect continue to work on the digital transformation of the cultural sector as numerous challenges remain.

Greece

It's worth to say that the Greek performing arts sector is a vibrant cultural landscape, but it stills faces distinct challenges. Some important issues include limited funding, outdated infrastructure, and limited accessibility to digital resources. The sector also struggles with declining audience engagement, especially among younger generations (Hellenic Ministry of Culture, 2023). Despite these hurdles, there are promising initiatives. Greek performing artists like Loukia Alavanou, are at the forefront of addressing these challenges by integrating technology into their work, utilizing tools like AI and VR to enhance storytelling and audience interaction (Alavanou, 2023). Moreover, festivals like the Athens Digital Arts Festival create spaces for innovative projects that merge performing arts with digital technology, setting examples for modernization. Additionally, projects such as the PREMIERE and VOXReality are equipping artists with AI and XR tools and aim to leverage XR technologies to enhance the understanding and accessibility of performing arts (VOXReality, 2024; PREMIERE, 2024). These efforts reflect a growing commitment to addressing sectoral needs and introducing global trends within Greece's unique cultural framework.
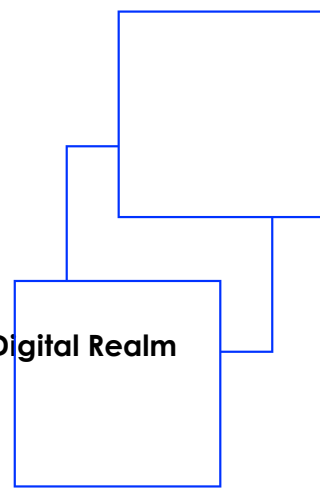
Spain

In 2014, AC/E Acción Cultural Española published their first <u>Digital Culture Annual Report</u>, with a special focus on the 'Use of new technologies in the performing arts' (2). They concluded that the performing arts sector in Spain was actively exploring digital tools and new media, though adoption varied significantly across institutions. The sector recognized digital technology as an opportunity to increase accessibility, reaching broader audiences and expanding the experience before, during, and after performances. The report also recognised challenges in adopting digital tools, including high costs, limited digital skills among professionals, and difficulty integrating second-screen experiences without detracting from live performances.

In these 10 past years, Spain's performing arts sector has embraced digital transformation, expanding hybrid and online formats to reach broader audiences, bolstered by increased funding and specialised training in digital skills. New technologies like VR, AR, and AI have introduced immersive and interactive experiences, while advanced audience analytics allow for more personalised engagement. Academic institutions like TAI School of the Arts and RESAD are incorporating digital skills into their curricula, while stagehouses and centers like IDEAL in Barcelona and Teatros del Canal in Madrid foster digital creativity on stage.

Italy

The Italian context of digital performing arts is rich and varied. In Italy, as in other countries, since the pandemic and subsequent closure of public spaces, greater attention and awareness of the yet-to-be-explored potential in the relationship between digital and artistic creation have been developed. The European Union through the "Next Generation EU" plan, also funded projects that would further stimulate the training and use of digital know-how in the various performing arts sectors. Mistrust still remains, both among professionals and audiences, so constant dissemination and training work is needed, as well as new spaces and situations that can accompany and host digital artistic research. The Digital Residencies network is an example of interaction between digital creatives, programmers, experts in the field and possible audiences to overcome mutual divisions and resistance.

(2) https://www.accioncultural.es/en/ace-digital-culture-annual-report

120 GOOD EXAMPLES

STRUCTURING THE EXAMPLES

In order to structure the example reports, the Guidebook uses 2 different types of cathegorization.

Firstly, examples have been grouped based on the regions of the partner organisations. The purpose of this is to showcase the geographical spread of the examples, and to provide local actors in each region with an easy to access overview of their nearby networking opportunities.

Secondly, the examples have been cathegorized based on which type(s) of technology is being utilized.

The goal of this guide is to be informative, but also appealing and energizing for the curious reader.
Each report contains a visual representation of
the subject, as well as a QR code directing
the reader to a website or a longer report where
more information can be found.

TURN THE PAGE TO SEE THE 120 EXAMPLES!

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SWEDEN

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Mobilized, 2023
Sound, Web / online

Nea Landin & Gabriel Widing - Stockholm
Mobilized is a participatory performance exploring the power and potential of the smartphone. The format is based on simple instructions and choices that appear on your screen through text, images and sound. The instructions shape different situations and collective movements.

**Bombina Bombast, Emma Bexell & Nea Landin - Malmö**
This performance series invites a new visiting artist each day, to explore streaming tools in relation to their own artistic practices, and to create a performance specifically for live streaming, to be shared that same night. STREAM SLAM is part of the larger project Prototypes for the Future of Performing Arts, aiming to think through and with digital media in the making of performing arts.

STREAM SLAM, 2024
Web / online

Nea Landin
Web/online, VR, Smartphones
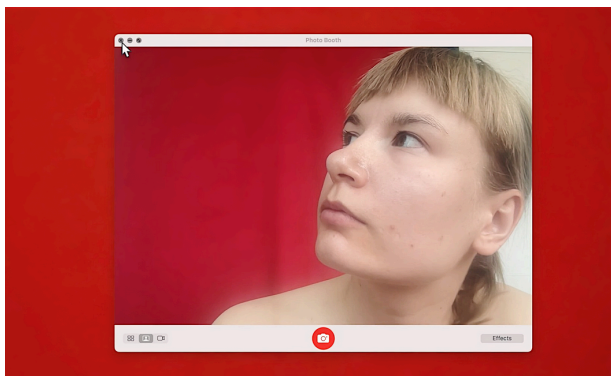

Nea Landin - Stockholm
Nea explores what she calls "the digi-corporeal", seeking to reimagine the central ideas of a movement-based practice from purely physical into the digital. Previous works include "desktop.dreams", where the computer desktop becomes a stage and programs such as Excel, Chrome, Mail and Photo Booth act as extensions of body and mind, and "OTHER", an intimate online meeting between two participants.

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Virtual Rehearsal Space, 2022
VR
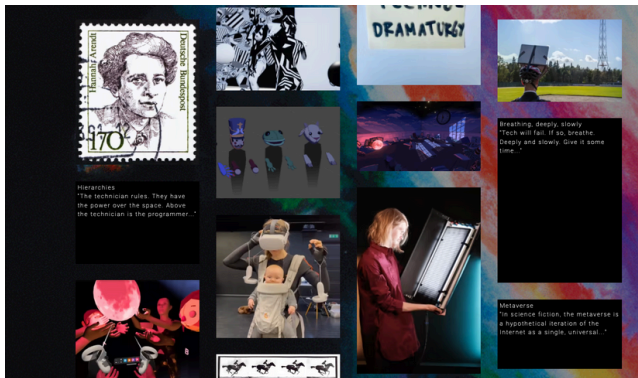
Bombina Bombast, Robin Jonsson, DynoRobotics - Stockholm
VRS explored remote rehearsals in virtual reality. The result was, in short, a system that enables performing art creators to rehearse remotely in VR. The website shares their journey, lessons learned, resources such as tutorials, and deeper insights for those interested.

Robin Jonsson - Stockholm
The audience finds themselves at the center of an artistic transformation, where the physical presence is challenged due to the digital impact. Choreographer Robin Jonsson is experienced in creating productions with different setups using VR as platform for creating live performances.

Get Real: Performance, 2023
Physical Realities, Physical tech, Sound, Web/online, AR/MR, VR

Workshop in Motion, 2024
VR, AR/MR, AI, Web, Sound

Stefan Bexell Stanišić & Robin Jonsson - Malmö
This course introduced Motion capture and VR in performing arts. The aim was to learn about different concepts, technologies and creative processes in performing arts where motion capture and VR are central, as well as to get tools that could be used in one's own practice.

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Immersive Media, 2025
VR, AR, MR, AI, Sound, Web, Physical Tech

Valentin Malmgren - Stockholm
Immersive Media puts theory into practice by conducting experiments with XR. For example, by making 360-degree videos, recording with binaural microphones and using 3D scanners/photogrammetry. There will also be orientation on the role of AI in XR environments, history of XR and its future potential.
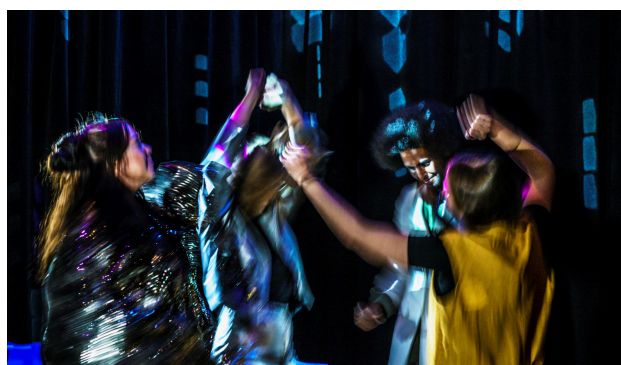
Everybody Dance! - Stockholm, Norway
Everybody Dance! was built up as a 50% exhibition and 50% dance floor.The exhibition had five big themes: Sharing dance, tradition, community and identity. The visitors could dance and immerse themselves into many recorded dance floors using the VR glasses.

Exhibition, 2020-2021
VR, Interactive sound, Dance installations

AI.DENTITY, 2024
AR, Physical tech, MR, Lectures

Erik Rosales - Stockholm
AI.DENTITY blurs the boundaries in the conversation about AI and our contemporary world. By using AI as both a tool and a co-creator, this interactive performance lecture by Erik Rosales explores how artificial intelligence influences and shapes our identity. Every aspect of the performance is manipulated by AI.

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Memory of Water/Bridging Digital, 2018-2024
VR, Web/online, Film doc., Workshops

Jonas Myrstrand, Studio Jox - Gothenburg
Participation in the Creative Europe project Memory of Water as an artist with film, documentation and Swedish Shipyard history in Virtual Reality: "The shadows of the shipyard era comes to life in VR". Participation in Bridging Digital leading Immersive workshops and teaching 360 film as a part of "Create performing arts" in VR.

Anna Näsström & Johan Bandholtz - Stockholm
The duo "Ongoing Realities" explore dance and choreography in the context of digital technologies such as VR, AR, and AI. [e s c] is a 45 min dance performance with four dancers that explores escapism as a state of mind. The stage is transformed into a place where past, present and future meet.
Photo: Tony Hultén

[e s c] 2023
VR, AR/MR, AI, Sound

Noah Hellwig
VR, AR/MR, Physical tech (robotics, drones, sensors, etc), Virtual Realities, Analogue translations of digital media

Noah Hellwig - Stockholm
Noah Hellwig explores digital media through embodied practice, investigating how experiencing an expansion of our senses can change our understanding of reality. His often immersive works blend digital, physical, and fantastical elements, treating each perspective as equally vital. Inspired by virtual reality and video game formats, his performances create unique, multisensory experiences.
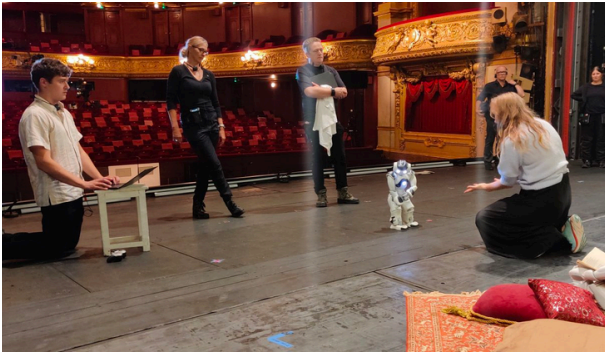Photo: Fernando Molin

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Dyno Robotics, 2018-Present
AI, robotics, VR, and mixed reality

Dyno Robotics - Linköping
Founded in 2018, Dyno Robotics merges AI, robotics, VR, and mixed reality to transform stage art. We have collaborated with artists to integrate robotic arms interacting on stage, VR-controlled humanoid robots, and immersive VR experiences with full body tracking into performances. Our mission is to empower artists to explore new creative frontiers and pioneer technological innovations.

Gynoïdes Project, 2009-2018
Physical Tech, Sound

Marie-Andrée Robitaille - Stockholm
The project explores women's agency and representation in circus arts, by searching for alternative modes of composition. They investigated the use of motion capture technologies to explore and expand the relationships between sound and motion in circus arts.

Bombina Bombast, 2011 - Present
VR, video design

Bombina Bombast - Malmö
BB is an award-winning performing arts company in Sweden that has carved out a field of their own in which performance, art and technology are deeply intertwined – a place where stories are rooted in the nonsensical moments of today and where nothing is impossible. They have a reputation as pioneers within all of their fields of operation; performing arts, VR and video design.

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TOSBOT Nov 2023
AI

**Saloranta & de Vylder - Stockholm**

An artificial intelligence, trained by the artist duo Saloranta & de Vylder, acted as playwright and dramaturge in TOSBOT, a vaguely post-apocalyptic performing arts show where we follow a musician, an opera singer and an acrobat in a realisation of life. The AI that helped write the show also gave it the long title "Tomorrow Officially Sucks but Today is the Best (TOSBOT)"
Photo: Erik Pousette

THE SPHERE
New media, web, research

The Sphere is a research-creation project exploring and developing new ecologies of funding for the performing arts. Inspired by recent innovations in the field of blockchain and distributed ledger technologies, the project's goal is to redistribute the risks and opportunities of making art by facilitating the creative involvement of invested audiences at different stages of the artistic and curatorial process. The project was prototyped on the circus sector.
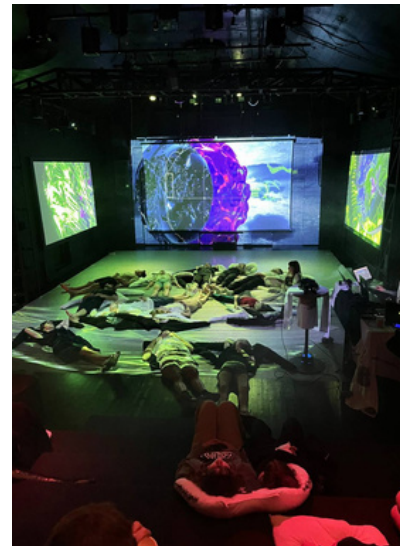
Lund University Digital Interactive Concert Hall "LUDICH", 2023
AI, multi-camera streaming

LUDICH is a collaboration initiative led by the Faculty of Arts of Lund University. Its goal is to develop the cultural experiences of the future. Using AI and other digital tools, the project will explore new ways to make culture more accessible, interactive and personal. Malmö Live's concert hall will serve as a "living lab" and be equipped with technology for testing. Two tests, or takes, are planned per year.

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Juggling Robot Project, 2018-2020
Robotics

JuRP is a recurring robot project in the Mechatronics Advanced Course at KTH Royal School of Technology. Constructing a juggling robot is a feat that requires knowledge in areas such as mechanical construction, electronics, software and communication, as well as counselling from human jugglers.

Embodying VR and Motion Capture
VR, AI

Alice Tatge - London
Lecture exploring the role of the performer and how to tailor one's performance to heighten the virtual experience for both performer and audience member. Since the brain responds very differently to virtual environments, when speaking specifically about VR, ho do we integrate a somatic understanding of the basic principles of sense perception, body mapping & kinaesthetic awareness.
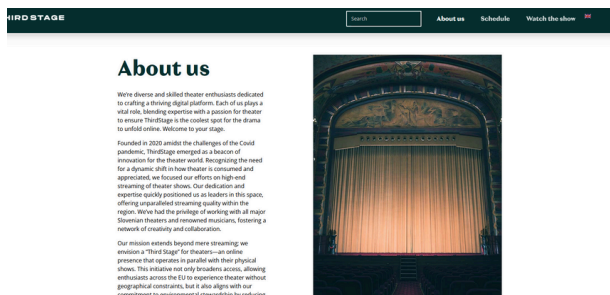
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SLOVENIA

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Third stage
streaming platform

ThirdStage.eu – Pan-European platform and innovative business model for distribution and promotion of AV streaming of European cultural performances is to develop an innovative platform for broadcasting of European creative and cultural works in order to showcase innovative tools and methodologies in order to safeguard, develop and promote European cultural and linguistic diversity and heritage.

SIMS
multichannel streaming tool

Inovative format of multi-channel live stream SIMS has 4 strategically placed cameras and therefore 4 different perspectives of live events – and a playful experience of changing them. It offers the user a different, attractive and unique experience of contemporary performative street art, which he can (co)create on his own, and in dimensions that go beyond live viewing.
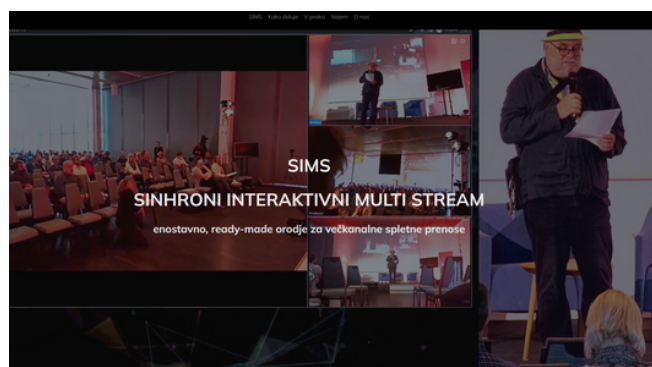
Archduke John, Father of Meranovo
Hybrid exhibition

In 2022, KIBLA2LAB opened a hybrid museum exhibition which is part of RUK Network. The exhibition will take you through the history of the estate in a different way. Through artistic processes and ambient installations, we explore and present these themes in new ways, from physical objects to the experience of the latest technologies.

Photo: Damjan Švarc

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LutkAR
AR app at Maribor Puppet Museum

LutkAR is a fun and educational application through which we wanted to breathe life into the exhibition, just as a puppeteer breathes life into a previously inanimate object, a puppet, through his animation. The exhibition space is further animated through the app. We focused on augmented reality, on audio-visual production and on the combination of original pictorial material and photogrammetry.

Photo: archive KID KIBLA

Louis-Philippe Demers: The Tiller Girls
AI developed robots

The Tiller Girls, made by Louis-Philippe Demers, is a group of 12 small autonomous robots that were developed with AI for the study of gaits given minimal freedom of movements. The robots can only balance their torsos and shoulders but they can yet achieve a large variety of expressions and behaviours.

Photo: Matej Kristovič

Stelarc: The Prosthetic Head
3D avatar

The Prosthetic Head is an embodied conversational agent – an automated, animated, informed and reasonably intelligent head that speaks to the person who interrogates it. The 3D model is a 3000-polygon mesh, skinned with the artist's face. It can compose and recite its own poetry-like verse and song-like sounds, which are different each time it is asked.
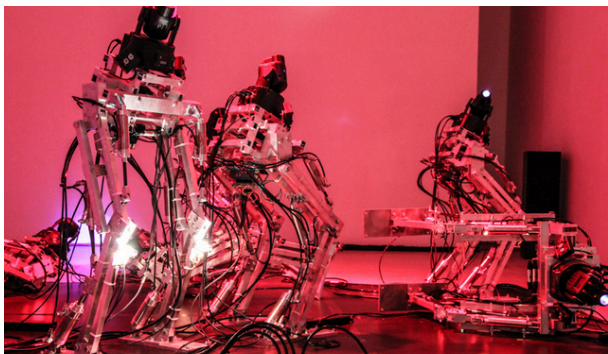
Photo: Boštjan Lah

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Bill Vorn: DSM-VI
Robotic performance

This robotic art installation by Bill Vorn stages creatures expressing symptoms of "abnormal" psychological behaviours and stuck with some serious "mental health" problems and other forms of behaviour and mental disorders. The robots are abstract structures made of aluminium, plastic and silicone it is mainly their behaviours that give them an organic and living aspect.

Photo: archive KID KIBLA

En-Knap: Stage 360
VR, 360 film, 360 performance

Stage360 means the establishment of a new type of post-production in the form of virtualization of performances and a special (guided) viewing of performances with VR glasses, recorded with a 360° camera from the center of the stage. It is primarily a new type of promotion of contemporary art practices and a closer connection with potential new audiences.

So Kanno: Lasermice
Swarm robotic installation
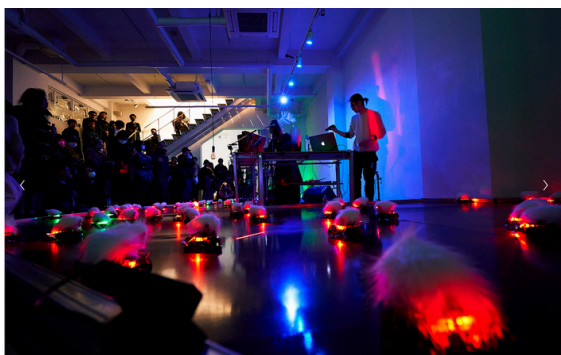
"Lasermice" is a swarm robotic installation that consists of 60 small robots, which inspired by synchronous behavior from insects like fireflies. Normally network of swarm is invisible, but in this case those robots create visible network via laser light – photodetector communication. This project is about making artificial natural phenomena.

**Co-funded by
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Hallerstein
Multilayered performance

The use of video, three-dimensional graphic objects and environments, animation and the seeming infinite virtual space serve to replace the physical environment on stage. The virtual shade puppet is manipulated by the dancer through a system of digital data transmission of sensory spatial movement tracing.

Photo: Boštjan Lah

Martin Bricelj Baraga: Robovox
Interactive sound installation

RoboVox is an interactive sound installation, using SMS for general public interaction. The purpose of RoboVox is to serve as a tool for an individual, whose voice usually gets lost in the sounds of the mass. Upon receiving the SMS RoboVox says out loud the statement, the protest, the declaration of love, or whatever the message may read, thus lending its voice to the anonymous individual.

Photo: archive KID KIBLA

Hochschuh & Donovan: Emmpathy swarm
Interactive robotic performance

This artwork made by Katrin Hochschuh & Adam Donovan features twenty-five autonomous robots. They narrate abstract versions of human-machine interactions in which movement functions as a mutual language. The artwork integrates not only humans but also machines as social creatures. The driving force of each robot derives from an extension of Craig Reynold's artificial life program.

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Audio Ballerinas and Audio Peacocks
Electronic clothes performance

Audio Balerinas and Audio Peacocks were mada by Benoît Maubrey.
Audio Ballerinas use electro-acoustic clothes and dresses (equipped with amplifiers and loudspeakers) that make sounds by interacting thematically and acoustically with their environment. Audio Peacocks performers wear electro-acoustic instruments shaped into a peacock's fan-like plumage that is highly directional – projecting the sound into a space like an oversized radar dish.
Photo: Matej Kristovič

Rose
AR, hologram

In one of the most representative rosaries in the world, we place roses in a different way - we relocate them from their natural environment to literary, sound and visual illustration and intermedia installation – an upgraded experience of extended reality that simultaneously evokes a special experience in the real environment of the botanical park and in the metaphysical world of art.

Photo: Damjan Švarc
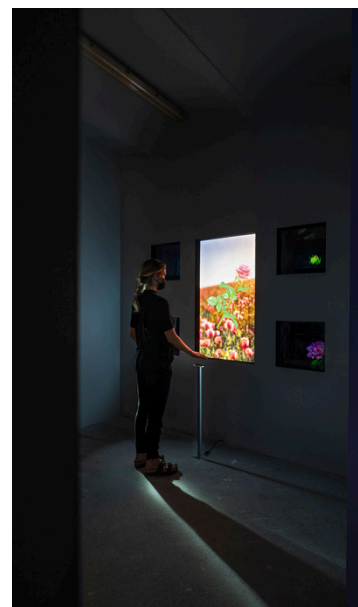
Tanja Vujinović: AvantGardeTopia
VR and sound installation

Tanja Vujinović's practice is deeply rooted in the overlaps and in-between spaces of art, technology, and science. In her multidisciplinary projects, she intertwines virtual reality, principles of video games, storytelling, 3D modeling, AI, and electronic music to create new poetic and immersive worlds as social spaces for rethinking the present and imagining a potentially utopian future anew.

Photo: Janez Klenovšek

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Sašo Sedlaček: Oblomo
Cryptocurrency art platform

Oblomo is based on a combination of blockchain and machine learning technology and rewards users for not working with their own cryptocurrency. When the app detects users' inactivity, it rewards them by depositing Oblomo cryptocurrencies into their e-wallets. Users can use these coins to spend as much as they like in the platform's online shop and use their 'laziness' to buy a variety of goods.

Photo: Gregor Salobir

RACIF – Robots and Avatars
Robots, virtual worlds, telepresence

RACIF – Robots and Avatars was an intercultural, intergenerational and interdisciplinary group exhibition of artists from all over the world. This cultural exploration around a near future presented world of collaborations between robots, avatars, virtual worlds, telepresence and real time presence within creative places, cultural environments, interactive entertainment and play space.

Photo: archive KID KIBLA

NOTA
Kinetic AV performance

This AV performance is a transdisciplinary project that, with the help of modern technologies, addresses today's society's fascination with all-round progress, which is mainly based on the ever-increasing dictate of time. The trio uses touch-sensitive mats that create sounds and change the light. The whole composition consists of movements, sounds, images and shadows generated in real time.

Photo: Janez Klenovšek

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Robot Partners
Interplayed robotic performance

This is a long-term multidisciplinary project integrating art, science, humanities and technology. Operating as the conceptual framework of Doepner's art creation, it deals with the complex idea of partnership in general as well as partnership between people and machines. The project touches upon contemporary development ideals and images in an investigative, poetic, humorous and absurd way.

Photo: archive KID KIBLA

Chico MacMurtrie: The Subhuman
Robotic performances

The Subhuman (1985-2000) is a dark toned emaciated humanoid machine. His character and persona has held an important position in the evolution of the tribe of machines that have come to be known as the `Amorphic Robots. Since being brought back to life in 1992 as a machine, he has faced numerous rebuilds, enhancing his weathered appearance.

Photo: archive KID KIBLA

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BELGIUM

## Simple Machines - Ugo Dehaes
Robotics

In the 2021 performance Simple Machines, Belgian choreographer Ugo Dehaes investigates how he can grow and train robots himself. Using artificial intelligence, Ugo Dehaes lets his robots come up with a dance performance. As a result, his job as a choreographer also disappears. In this way, Simple Machines tries to filter humans out of the creative process.


Ulrike Quade Company
Robotics

The Ulrike Quade Company makes visual theatre. Based in the Netherlands, they combine Bunraku-puppet play and industrial robots with scenography, music, dance, and other modern technologies to create magical and poetic performances and projects. They aim to bring together new forms of puppet play with modern technology.
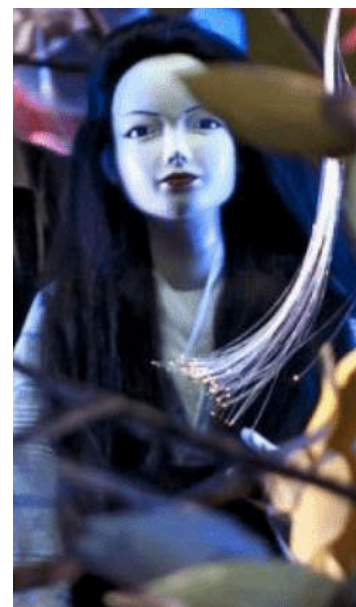
Innovation:Lab
AI, VR, AR, Immersive Technology
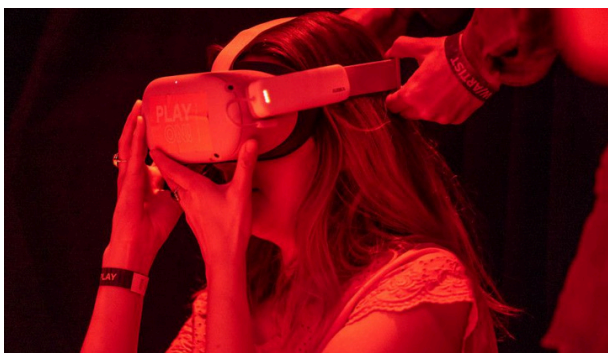
Since 2020, the Dutch Innovation:LAB has led research, experimentation, and interdisciplinary collaboration in theatre and technology. Their work covers mixed reality, AI, immersive sound, projection mapping, and more. By integrating technology and theatre on equal footing, they create transformative experiences that resonate with the evolving needs of future audiences.

The Digital Realm

Archival Echoes - Abner Preis Studios
AI

In the workshop Archival Echoes by the American artist Abner Preis, participants explore the fusion of history and technology by using archival images and AI to create a multimedia work and learn to use AI as a powerful tool for creativity. The workshop is led by Abner Preis Studios, an Amsterdam based experiential art studio that focuses on storytelling and new media.

Improbotics
AI

Improbotics is an international theatre lab that has been pioneering in improvised theatre and comedy alongside generative AI since 2016. Improbotics is both a science comedy show and a live Turing test. An artificial intelligence-based chatbot is performing alongside a human cast, and it tries to pass as human as it sends lines to one of the improvisers via an earpiece.
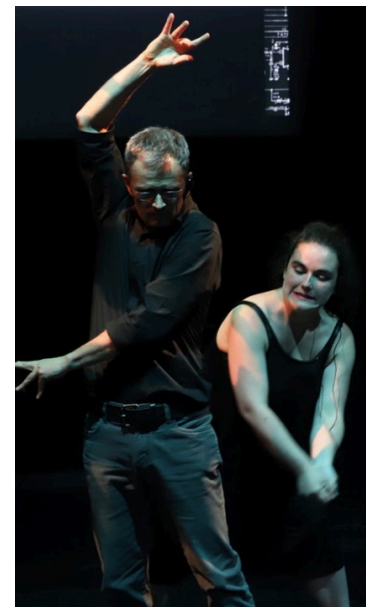
Alva Ishii - NTGent
AI
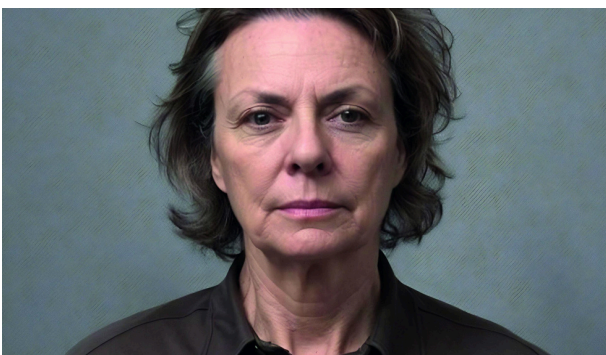
NTGent, the city theatre of the city of Ghent in Belgium, is developing a fully digital house maker named Alva Ishii. Alva Ishii gives interviews, will create performances and might even join the artistic board. Its development forces us to question new technologies. What does AI do to us? What critical questions are we not asking?
The photo is an AI generated photo of the different house makers of NTGent.

The Digital Realm

Another Kind of Blue
AI, VR, Drones

Another Kind of Blue is an innovative dance company from The Hague, Netherlands. They blend contemporary dance and technology into a unique, new art form. In their performances, the role of animations, drones, robots, film, and music is equal to that of the dancers. Currently, they are developing AI-man, a duet between free will and AI and they are
developing a live VR experience.
Photographer: Kim Vos
Dancer: Richel Wieles

Commune AI - Interrobang
Performance
AI

Commune AI is an online performance by German Interrobang Performance. In the performance, the audience establishes a commune in the digital space and inhabits a specially developed virtual platform for 75 minutes. Human participants express political goals, desires, and expectations for communal life, while AIs make suggestions for their implementation.
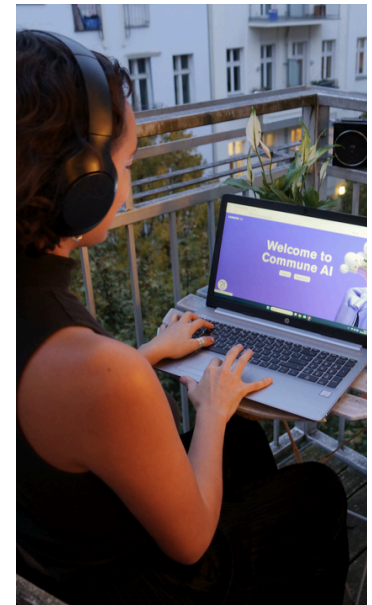
Songs for a Passerby - Celine
Daemen
VR

In the Virtual Reality-opera performance Songs for a Passerby by Celine Daemen, the audience wanders through a musical dreamscape. They step outside their body and follow their own 3D reflection as they walk past various poetic scenes. In 2023 Songs for a Passerby won the Venice Immersive Grand Prize at the Venice Film Festival

The Digital
Realm

Held In Human II: Rose In Your Brain - elektron.art (Liis Vares, Taavet Jansen)
Mixed Reality

Held In Human II: Rose In Your Brain is a performative installation experienced via the Meta-Quest 3 headset. Words and thoughts organize themselves into a mixed-reality space. They move, appear and disappear as they interact with each other. The audience can interact with the text and with other viewers. The installation was created in 2024 by the Estonian elektron.art.

Photo by Alissa Šnaider

Bozar Arcade
Gaming

Bozar Arcade is an artistic platform created in 2024 by Bozar, an arthouse in Brussels. Bozar Arcade invites critical reflection on video games as a medium for the creation and transmission of meaningful stories. It explores the potential to foster a sense of community and tolerance while pushing the boundaries between art and games.
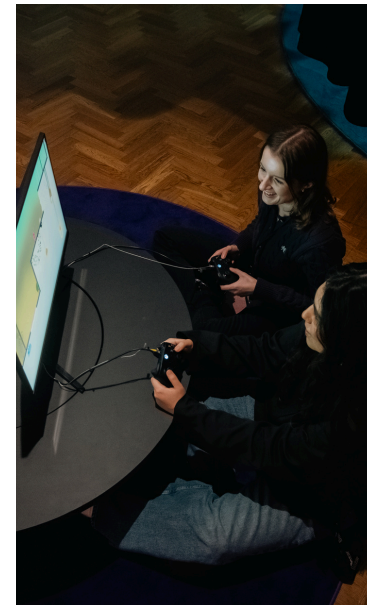
_jeanne_dark_ - Ziferte Production
Streaming
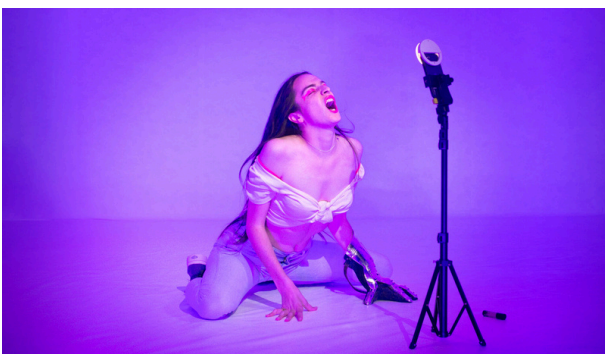
_jeanne_dark_ is a 2020 performance by the French Ziferte Procutions. The performance is livestreamed every evening of the show at the @_jeanne_dark_ Instagram account. _jeanne_dark_ is about the clout of social media, the public display of intimate, private moments, a disquieting sexuality, but above all, the raw power of unfiltered speech and the inventive portrayal of the protagonist's demons.

The Digital Realm

## Wheelchair Accessible Moshpits- A MAD Productions
VR

At the Alcatraz Metal Festival in Belgium, the wheelchair-using audience experiences the moshpit using VR. A cameraman with a 360° camera captures footage of the crowd, which is then edited and streamed to VR headsets, allowing wheelchair users to virtually be in the crowd for a moment. Developed by A MAD Productions in 2019, this experience has been featured at Alcatraz festival annually.

Alien Rescue - Jason Moore
VR

Alien Rescue is a MetaMovie: a live virtual reality experience where audiences play the lead role in an interactive movie. A MetaMovie delivers the thrill of a live performance, the cinematic feel of a film, and the personal and emotional experience of collaborative storytelling. Alien Rescue was created in 2020 by the American cross-platform writer, producer and director Jason Moore.
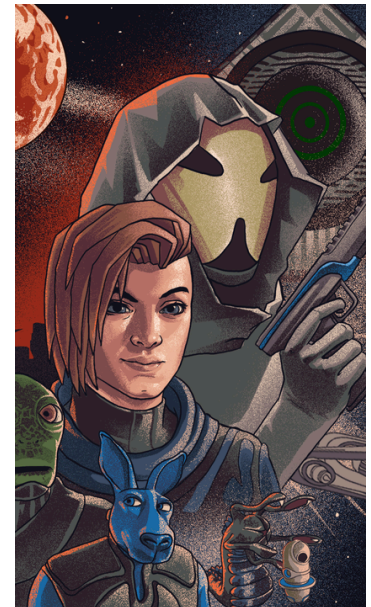
Be Arielle F - Simon Senn
VR

For his 2019 theatre show 'Be Arielle F', the Swiss video and performance artist Simon Senn, purchased the digital copy of a female body online. In 'Be Arielle F' he embarks on a quest to meet the woman whose body he goes on to inhabit thanks to virtual reality. He steps onto the stage to share his uncanny experience.

Photo by Elisa Larvego

The Digital Realm

Earth - Robbert&Frank Frank&Robbert
VR

Earth is a performance by Belgian artists Robbert&Frank Frank&Robbert created in 2021. In Earth a group of four participants enters an empty universe using virtual reality glasses. Participants visit each other's subconscious through drawing, fantasizing and free associating. The performance offers a peaceful space in a stressful world: the chance to stop for a moment and feel a sense of wonder.

6 degrees - Motionhouse
VR

Motionhouse, a Brussels-based interdisciplinary arts organization, created the performance installation '6 Degrees' together with Me-sa company and Brainz Immersive. '6 Degrees' takes the audience on a journey through an evolution of performances into ever-changing environments, blurring the boundaries of reality. The environments evolve alongside immersive technologies, drawing inspiration from the escalating warming of our planet.

Drie geraniums op een vensterbank - Joren Vandenbroucke en Annelies Van Hijfte

'Drie geraniums op een vensterbank' is an immersive performance in which three houseplants take a look at their owner, Patrick. Through virtual reality, the audience steps into the reality the man set up for himself, but in which he inevitably gets stuck. This performance was made in 2023 by the Belgian animator Joren Vandenbroucke and soprano Annelies Van Hijfte.

**Co-funded by
the European Union**

**The Digital
Realm**

Erwartung - André Bücker, Staatstheater Augsburg
VR, Gaming

In 2020, the State Theater of Augsburg established a new artistic division – the digital theater. In 2024, André Bücker, State Director of State Theatre Augsburg, created a VR production of Arnold Schönberg's mono opera Erwartung. In this experience the audience can explore Schönberg's music through game mechanics. Using a VR headset and controller, participants navigatine a nocturnal forest and shape the plot through their interactions.

CREW
VR, AR, AI, Robotics

CREW is a Brussels based international team of researchers, performers, technologists, writers, musicians, and designers founded in 1990. As a collective at the intersection of art, science, and technology, CREW asks the question: How does technology change us? They explore this by using immersive performances, placing spectators in another world and interacting with them in the (not) here and (not) now.

The Digital Realm

GREECE

The Digital Realm

DigitACT
3D, AR, Gamification

DigitACT is a transnational (Cyprus, Greece, Lithuania, Portugal, Italy) ERASMUS+ project which aims at supporting young performing arts professionals and technicians to adapt to the digitalization needs and evolution of their field as a means of setting up a sustainable and durable professional path for themselves and their working ecosystem. In Greece it was implemented by REON AMKE [Orestis Tatsis and Dimitris Kakavoulas] during 2021-2023.

Athens International Digital Film
Festival (AIDFF)
XR

The Athens International Digital Film Festival (AIDFF) is an exciting event that celebrates digital cinema since 2011. The festival, dedicated to the promotion of digital cinema, has established and championed the concept of New Cinema. It stands as the sole festival in Greece and one of the few in Europe that embraces all forms of cinematographic art. The festival features fiction, documentary, experimental.

THE BIOGRAPHY OF A SOFTWARE,
George Drivas
AI

The Biography of a Software, created by George Drivas in 2024, explores and presents the evolution of artificial intelligence programs in terms of creating human voices, photography and moving images. George Drivas represented Greece at the Venice Art Biennale, 2017. His work has been presented in more than 10 solo exhibitions and tributes and in more than 150 group exhibitions and festivals both in Greece and abroad.

The Digital Realm

Munti Analtu, Ilektra Maipa
Performance for camera

Ilektra Maipa (b. 1989, Greece) is a visual artist with a BA in Painting (Hons) and an MA in Fine Art (Hons). In 2020, she received the ARTWORKS Stavros Niarchos Foundation Artist Fellowship.

Munti Analtu, 2019, (Aromanian for "Tall Mountain") is a video installation featuring a poem and two monitors. It captures the "blue hour," when mountains shift to dark masses, evoking a theatrical set.

Uncanny Valley
Rimini Protokoll, Stephan Kaegi
Physical tech (Robotics, drones, etc.)

Stefan Kaegi creates documentary theatre plays, audio-interventions, curated formats and works in the urban environment in a diverse variety of collaborative partnerships. In *Uncanny Valley*, 2018, presented in 2024 Athens Digital Arts Festival in Greece, Stefan Kaegi works with a writer and playwright for the first time: Thomas Melle allowed an animatronic double of himself to be made. This humanoid takes the author's place and throws up questions like what does it mean for the original when the copy takes over?

Onassis ONX
VR, AR, AI, Physical tech, Web/online
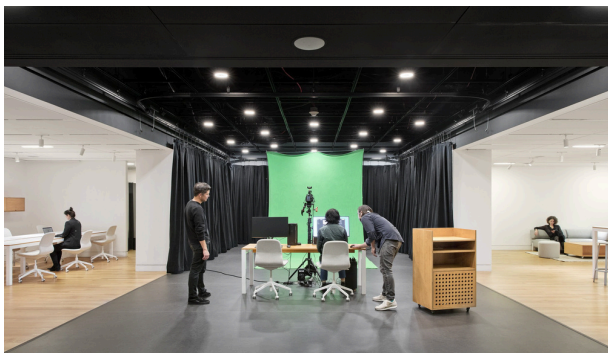
Onassis ONX, founded in 2020, is an Onassis Culture field-building platform dedicated to new media art and digital experiences. It empowers creators with cutting-edge technologies, artistic excellence, and financial sustainability. The program offers capacity-building, incubation, seed funding, and showcase opportunities for artists worldwide.

The Digital
Realm

## Polarities 01: Clytemnestra VS Agamemnon, Facta Non Verba AI

A collaborative performance, presented in December 2023. It examines dualities such as masculine and feminine, nature and digital simulation, using the relationship between Clytemnestra and Agamemnon as a canvas. The two-part performance addresses contemporary issues like patriarchy and the digitization of our senses, encouraging reflection on societal structures and personal ethics.

Athens Science Festival VR, AR, AI, etc.)

The Athens Science Festival, the festival devoted to Science and Innovation since 2014, is an established cultural landmark in the field of Science, Technology, Innovation and Art in Greece! For over 5 days every spring, residents and schools in and around Attica have the opportunity to explore scientific and technological advancements in an entertaining, innovative and interactive manner. At the same time, researchers, distinguished scientists, educators and artists give their best to communicate science.
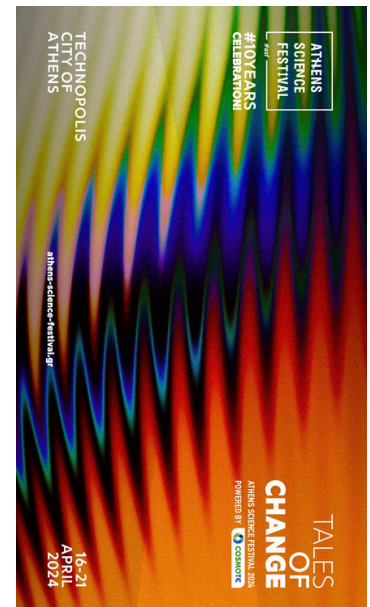
CAVES, Alex Raúl, Bats Bronsveld, Charleton Mercelina Virtual Realities, Sound, Music

CAVES is an animated virtual reality experience of a choir performance. The composition is sung by 8 masked singers, set in a prehistoric cave. Intricate vocal harmonies, recorded with spatial audio techniques, blend with the lush reverb of the virtual cave. Find yourself immersed in a deep listening experience, as a group of cave dwellers perform their intriguing evening ritual.

The Digital Realm

Eye's Walk Digital Festival
VR, AR, AI, sound, etc.

An innovative festival that combines digital technology, video installation & performing art, experiential design with the unique cultural and architectural background of a city. "Eye's Walk Digital" draws its themes from people and society in order to create a new kind of art by creating a synthesis all of the above mentioned. Its productions are developed in public space boldly and with the participation of artists, visitors and the community.

Athens Digital Arts Festival (ADAF)
VR, AR, AI, sound, etc.

The Athens Digital Arts Festival (ADAF) is an annual international festival dedicated to exploring the relationship between art, science, and technology. Showcasing contemporary digital art forms from a diverse global community of artists and scientists, ADAF has been representing Greece internationally in digital arts since 2005 and is the first institution of its kind to be established in the region.
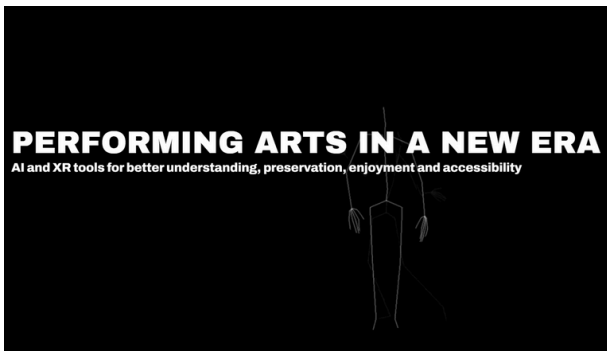
VOXReality project
AI, XR

The VOXReality project is a pioneering initiative that seeks to blend Augmented Reality (AR) technology with live theatre, transforming traditional performances into immersive experiences. The Athens Epidaurus Festival (AEF), a longstanding cultural institution in Greece, is a key use-case partner, spearheading the Augmented Theatre component of the project.

The Digital Realm

PREMIERE project
VR, AR, XR, AI

PERFORMING ARTS IN A NEW ERA
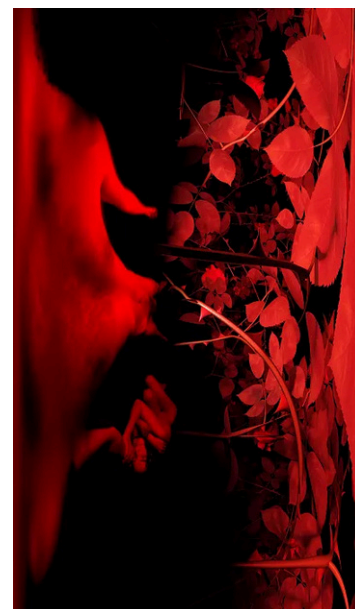AI and XR tools for better understanding, preservation, enjoyment and accessibility

The "PREMIERE" project focuses on integrating AI and Extended Reality (XR) technologies into performing arts to enhance the understanding, preservation, enjoyment, and accessibility of live arts in the modern era. By leveraging AI, XR, VR (Virtual Reality), and AR (Augmented Reality) tools, the project aims to create immersive experiences.
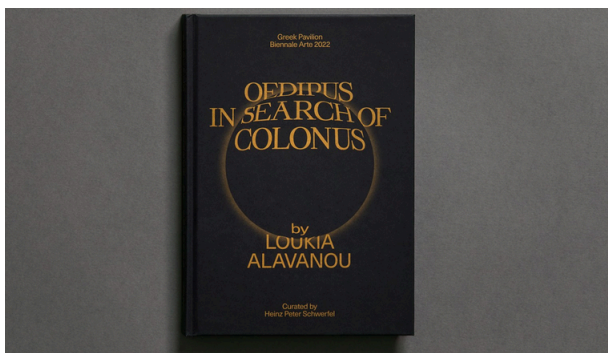
Medea Electronique
AR

Medea Electronique was founded in 2006 and consists of creative people who share the mood for innovation, moving in the greater field of contemporary art. Their activity includes contemporary theatre performances, experimental audiovisual performances and installations, site specific works, electroacoustic music compositions. Its work has been presented, inter alia, at the Onassis Cultural Center and the the Visitor Centre of the Stavros Niarchos Foundation.

Loukia Alavanou
VR

Greek Pavilion
Biennale Arte 2022

OEDIPUS
IN SEARCH OF
COLONUS

by
LOUKIA
ALAVANOU

Curated by
Heinz Peter Schwerfel

Loukia Alavanou is a Greek visual artist and the first VR film producer in Greece who utilizes VR to reinterpret classical Greek narratives, with a focus on immersive storytelling that highlights contemporary social themes. Her VR installation Oedipus in Search of Colonus, showcased at the 2022 Venice Biennale, is one of her most acclaimed works.

**The Digital
Realm**

Thessaloniki International Digital Arts Festival (THEDAF)
VR, AR, AI, sound, etc.
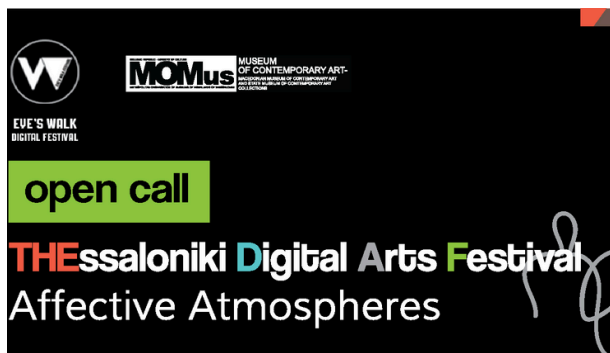
The quite new Thessaloniki International Digital Arts Festival (THEDAF) is sought to expand the concept of heritage and become a meeting point for contemporary art with the public history of Thessaloniki today, through digital art, performance, circus art, and psychogeographical wandering.
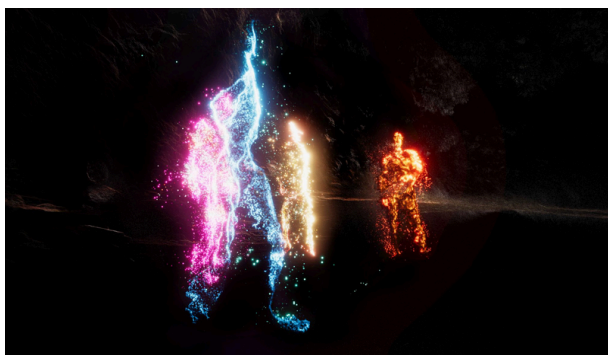
WORKSHOP: Critical AR(t), Caterina Antonopoulou
AR

Workshop conducted by Caterina Antonopoulou (GR) as part of Athens Digital Arts Festival (ADAF) on interventions through AR in arts. The workshop, examined how Augmented Reality (AR) can be turned into an artistic means of critical and tactical interventions.

Floating with Spirits, Juanita Onzaga
VR

In this cinematic virtual reality, created by Juanita Onzaga and presented at 2024 Athens Digital Arts Festival (ADAF), magical stories are told by 2 young Mazatec, indigenous sisters, Jocelynne and Jaquelyne, who recall the ancestral knowledge and mystical cosmogony that their shaman grandmother used to share with them, in the misty mountains of Oaxaca, Mexico.

The Digital Realm

Cyborgian Living Room, Super Gonorrhea ft. Captain Stavros
### Video art, AI

The Cyborgian Living Room, created by Super Gonorrhea feat. Captain Stavros, is a captivating segment within the "Technological Intimacies" series, as part of ADAF, transcends conventional boundaries to explore intriguing concepts and the intersection of technology with our daily lives.

Gym Lesson, Eleni Dimopoulou
AI

The "Gym lesson", by Eleni Dimopoulou, is a work written and directed by an assistant AI -Open Chat GPT – ChatGPT (Generative Pre-trained Transformer) is a chatbot launched by OpenAI in November 2022. It was presented during ADAF 2024. It is built on top of OpenAI's GPT-3 family of large language models, and is fine-tuned (an approach to transfer learning with both supervised and reinforcement learning techniques.
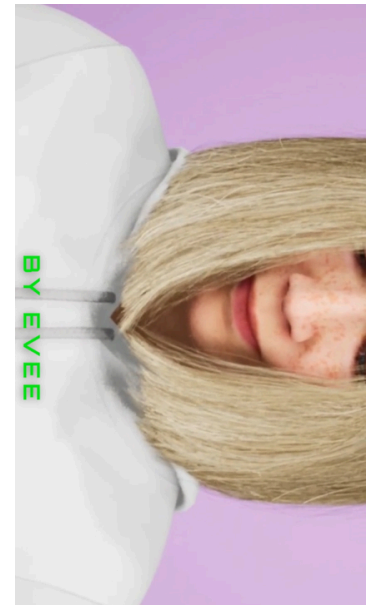
The Digital Realm

SPAIN

The Digital Realm

Transcending Species, Manel De Aguas
Sound, Physical tech, AR

Transcending Species is Manel De Aguas' (Barcelona, Spain) debut album in 2024, narrating 11 chapters of his cyborg journey after adding a new sensory organ that allows him to perceive weather through sound via head implants. He explores themes like non-human identity, solar-powered cyborg energy and cyborg rights. Each track features sounds generated by his Weather Fins, evoking shifting weather throughout the album.
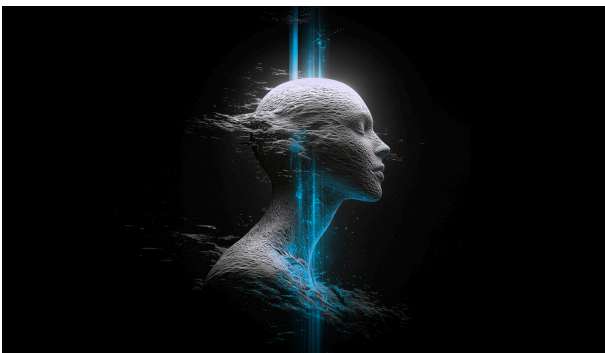
Kamikaze lovers, Marta Galindo
Virtual Realities, AI, Sound, Physical tech

Kamikaze lovers, a project of the Spanish artist Marta Galindo (Madrid, Spain) and fist shown in 2024, is a performative project that imagines warfare technologies capable of developing empathy and sensitivity. The project takes as its starting point the iconic dramatic text of Romeo and Juliet to offer a revised interpretation where the main characters are embodied by flying drones—two machines from enemy factions that abandon their militancy for love.

KAMIKAZE LOVERS

Opereta en un solo acto
Libreto
MARTA GALINDO GARCÍA

Música
ÁLVARO CHIOR

Con un breve ensayo de
JORGE VAN DEN EYNDE

Un cuento de amor para tiempos de violencia tecnificada
Inspirada en la historia de Romeo y Julieta

Multiverse, HUMANHOOD
VR

Multiverse (2024) is a hypnotic full-body VR experience, of the performance collective HUMANHOOD (Barcelona, Spain), that combines interactive clouds-like visuals, bone-conducting bodysuits, synchronised breathing and immersive sound-score, ushering the user into a 8min multi-sensory ride.

The Digital
Realm

PHANTOM LIMB, Mit Borrás
## Physical tech, Multimedia Installation

Phantom Limb (2021) Is a piece of digital performance, multimedia installation, film + robotic art that belongs to Mit Borrás' (Madrid, Spain) body of work ADAPTASI CYCLE with the Creative Direction & written by Rachel Lamot (Madrid, Spain).

WE ARE THE AI RESYNTHESIZERS, Shoeg
AR, VR, Web/Online

Shoeg (Barcelona, Spain) developed WATAR (2024). In recent years, AI has reached everywhere. Big tech companies frame AI as a tool for emulating human behavior, but at its core, it remains a system based on statistical processes. While its outputs mimic human creativity, AI works ethically better within a human-machine-human cycle, where humans curate and amplify. WATAR embodies this concept in a virtual plaza created for the XR CAMP project.
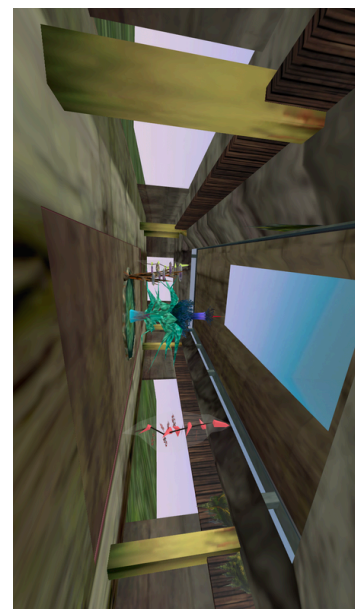
nuevo_algo_ritmo.ckpt, MANS O +
Joan Sandoval. AR, Physical tech,
Sound

MANS O and Joan Sandoval (Barcelona, Spain) developed this project in 2024, that is an innovative AV tech show that takes the audience on a journey through the often hidden stages of AI model creation. By displaying custom raw datasets, revealing different model training stages, performing code visualization, and synthesizing MANS O's body
 through live tracking cameras,
the performance provides
insight into how algorithms work.

**The Digital
Realm**

Human Learning, Eneritz Tejada
### Sound, Physical tech, dance

Human Learning (2022), of the artist Eneritz Tejada (Barcelona, Spain) explores human cognitive abilities' limitations through an emotional confrontation with inhabiting a human body. Speculating on a future where we will integrate technology into our bodies, the proposal explores, through interactive bodily devices, the sensory modalities of memory beyond the digital world.

Paisaje sonoro, Akyute
Physical tech, Sound, Performance

Sensor driven music and visual performance by collective Akyute (Barcelona, Spain) in which the intra-action (Barad, 2007) between the artist and space/time immersion in technological nature is observed by the audience The public is guided through the experimentation process whilst the performer generates the live soundscape through the biodata visualization system emitted from the plants temporarily inhabiting the installation.
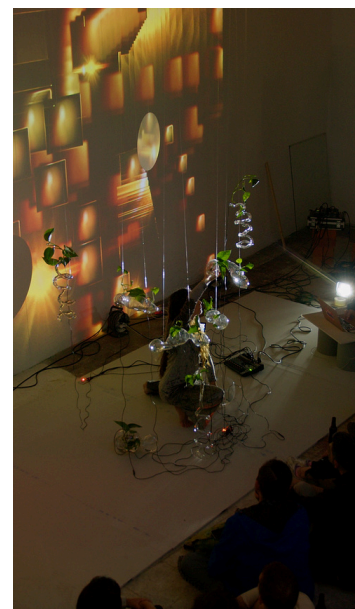


Ronin (浪人)*, Guayaba
VR, Sound, Online

Ronin (浪人)*   is a live performance that happens simultaneously in the physical and the digital space. Guayaba is the VR Avatar alter ego of musician Ricardo Candal (Madrid, Spain). Using VRChat as his main platform, Guayaba captures his facial gestures and full body movements to travel different worlds of the social network to perform his latest album presented in May 2024.

Co-funded by the European Union

The Digital Realm

## Sirenes i Robots, Joan Llort + Tarta Relena
Physical tech, Sound
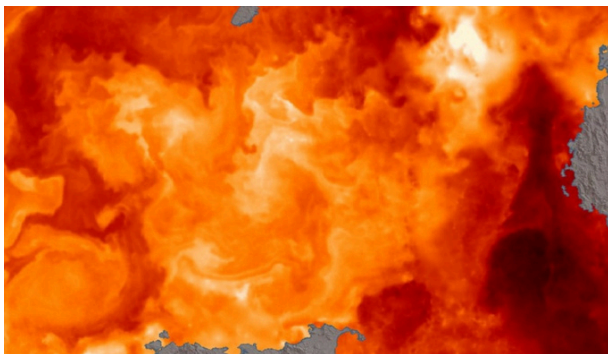
Oceanographer Joan Llort and singing duo Tarta Relena (Barcelona, Spain) have gone on a quest for sirens' songs thanks to Argo underwater robots which capture data on water temperature as they drift in the Mediterranean, creating Sirenes i Robots in 2024. They take us on a journey to discover what they sound like and what they have to tell us.

María CHOIR, María Arnal
AI, Sound

Maria CHOIR (2023) is a human-AI interactive musical artwork by María Arnal (Barcelona, Spain), created to be experimented in person through the act of singing. the installation offers an AI-tool that reacts in real time, sonically and visually, to whatever the visitor sings, like an experimental echo-chambered acapella karaoke duet.
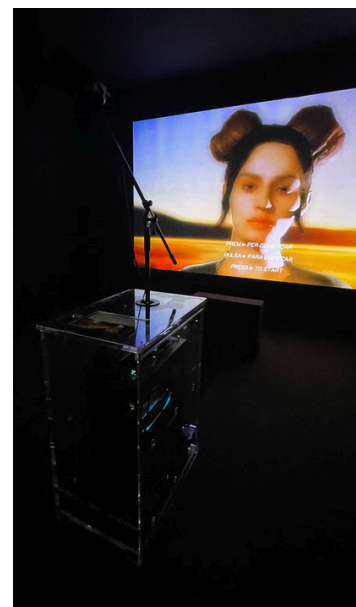
Orfeo 5063, Guillaume Marmin
Physical tech, Performance

Guillaume Marmin (Barcelona, Spain) revisit with Orfeo 5063 (2022) several of Monteverdi's masterworks, transposing them into a hypnotic staging. Far from the traditional formalism of opera, this musical program is constructed and performed around a film inspired by the myth of Orpheus. Through drone-filmed sequences, Monteverdi's music travels through the history of art and humanity.

The Digital Realm

La Cuerpa, ALV Adina
Physical tech, Sound

La Cuerpa (2022) is a sound performance of the Mexican-spanish artist ALV Adina (Madrid, Spain), who with touch sensors and microphones expands her body towards the aural spectrum. La Cuerpa was her last EP that was presented as a visual and sound experience.

¥€$Si PERSE
VR, Sound, Online

¥€$Si PERSE's (Barcelona, Spain) work revolves around the mutation of institutional artistic practice with memetic variations that come from popular performative formalizations, such as party contexts, Cosplay / Larp Conventions (Live Role Playing) and Online Communities, developing artworks that combine capitalist and neoliberal imaginary with speculative science fiction and urban fantasy, a promiscuous exercise of figurative imagination.

## SOLAS, Candela Capitán
Web/online
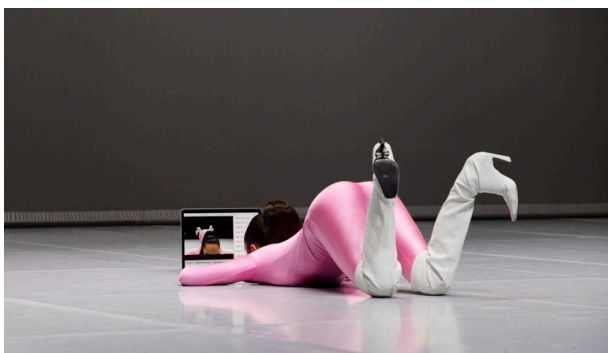
SOLAS is a choreographic work by Candela Capitán (Seville, Spain) for an ensemble of bodies, webcams and a live streaming web platform. This performance piece for a group of female performers and multimedia connectivity is conceived as a generational symptom that explores the supplanting of identity and the over-exposure of the female body within new communication platforms and explores the limits of the body from a Western perspective.

The Digital Realm

laSADCUM, Guillem Jiménez + company
## Physical tech, Web/online
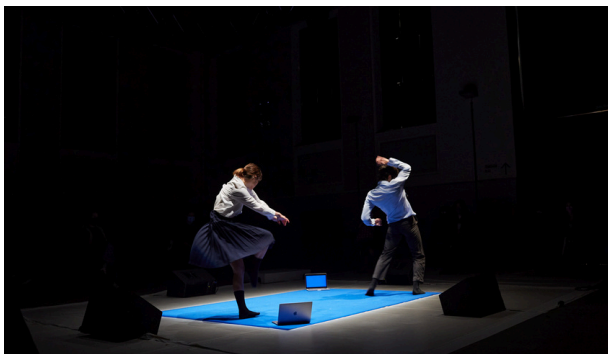
laSADCUM is a dance group directed by Guillem Jiménez (Barcelona, Spain) in which the collective explores how sexuality and socialization, especially for new generations, are defined by their interactions in the digital realm.

IN-SONORA Platform
VR, AR, AI, Sound, Physical tech

Insonora acts as a platform for artists that work in the realm of interactivity and sound installation and performance. They hold an anual event, IN-SONORA Festival (Madrid, Spain), in which they curate and invite national and international artists and performers to conduct a showcase of art pieces, art residencies, workshops and conferences regarding interactive and sound art.
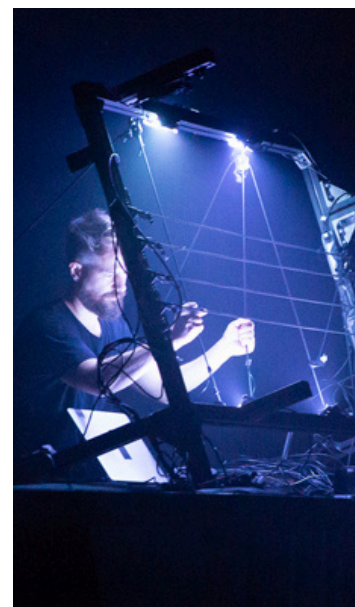
## "V Contiene metal", Lolo and Sosaku
Physical tech, Sound

"V Contains metal" is an artwork by the duo Lolo y Sosaku (Barcelona, Spain) that explores the sonic experimentation of inorganic resonance and the investigation of pulsating beats of the industrial noise landscape with danceable passages that pushes the limits of the post hard techno industrial sound.

The Digital
Realm

Additive Vibration, Hamill Industries
Physical tech, Sound
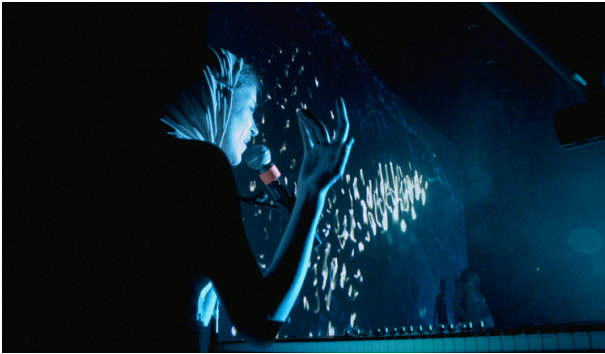
'Additive Vibration' is a show that explores the idea of vibration through sound, movement and light. Musician Marina Herlop, dancers Anna Serra and Ariadna Montfort and visualists Hamill Industries (Barcelona, Spain) join in this performance in which sound is influenced by dance, dance is influenced by music and all are influenced and brought together by the visual experience.

KRUID, Servicios Inmersivos
VR, AR, MR

KRUID is an interactive mixed-reality dance performance created by Servicios Inmersivos - Carles Castaño + Sau-Ching Wong (Barcelona, Spain), blending dance, theater, and 3D art. Inspired by its host space, it uses virtual reality to create an evolving narrative shaped by performers and audience interaction, transforming architecture into a dynamic, immersive fantasy world.

**Co-funded by
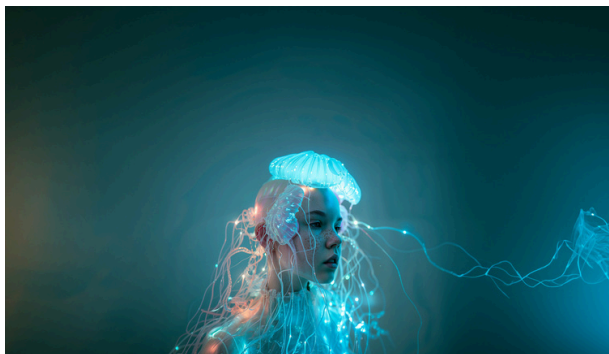the European Union**

**The Digital
Realm**

ITALY

The Digital Realm

Digital Residencies
Performances digital and phygital

Digital Residencies project was created in 2020 from an idea by the Artistic Residency Centre of Tuscany (Armunia – CapoTrave/Kilowatt). Through a call for proposals launched once a year, support is given to artistic projects related to the languages of contemporary performance, to be created directly for the digital environment. The network includes ten venues, among Italian festival and theaters.
Image created with AI

Toxic Garden
AI, Web / online (streaming, gaming, 3D, etc), Sound, VR

"Toxic Garden" is a participatory online performance on a Roblox map created in 2022 by the Italian artist and scholar Kamilia Kard. Upon entry, participants' avatars lose their individuality, transforming into poisonous plants and dancing together, automatically synchronizing with the artist's avatar in a choreography that reflects toxic relationships.

DIGITALIVE - Physical tech, Web / online, Sound, AI, AR, VR, Digital Performance

Virtual reality, artificial intelligence, electronic music experimentation, metaverse and digital cultures meet in DIGITALIVE, the Romaeuropa Festival section dedicated to digital arts & performance, curated by lecturer and independent curator Federica Patti. A gateway to an ever-evolving world driven by technological and artistic innovation.

The Digital Realm

Onirica ()
### AI, Physical tech (robotics, drones, sensors, etc), Sound

Onirica () is a live media performance realized by the Italian multidisciplinary art studio fuse* in 2024. The project explores the ethereal perception of the body within the realm of dreams. Belonging to the series of works of the same name, the performance offers a novel exploration of that same narrative, this time with a new focus on sleep and dreams
in their corporeal component.

Simposio
Physical tech, AI, Sound

Simposio is a programme of activities, meetings, performances and installations that took place in the Belluno Dolomites in 2020. A programme created in collaboration with None Collective, promoted by Marcello Cualbu, to activate a public debate and stimulate, a reflection on contemporaneity and its perceptual, cognitive, social and economic implications.
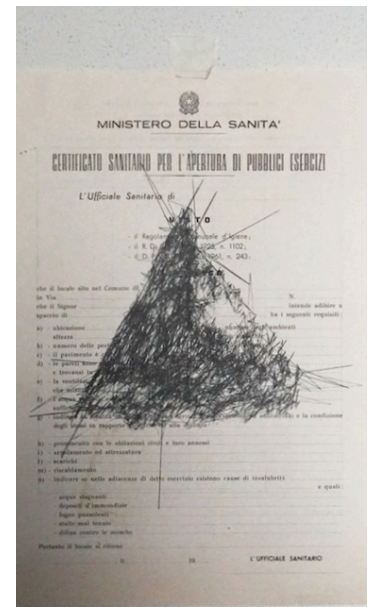
Humanverse
VR, AI, Web/online, Physical tech
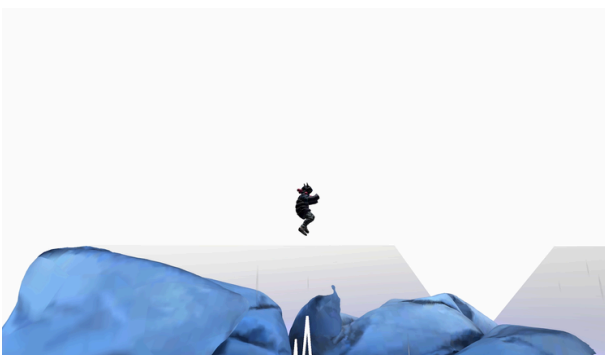
Humanverse is a project of the Italian and Argentinian visual artist Martin Romeo. Started in 2023 as a digital research project, it became a work of performing art that addresses the shortcomings of the Metaverse, such as realism, disorientation, and lack of relationships. The experience, dedicated to a group of five travelers, features a guide character who introduces the concepts and activates the interactions.

The Digital Realm

Distrust Everything by Lorem
AI, Sound, 3D photogrammetries

Distrust Everything, curated by the Italian organisation Re:humanism since 2021, investigates the relationship between the human and algorithmic unconscious through an intense aesthetic experience. Conceived as an AV installation and live performance and developed through AI systems and 3D photogrammetries, the work is currently morphing into a multi-platform narrative universe for single and multichannel interactions.

MEET Digital Culture Center
VR, AR, AI, Physical tech, Sound

Since 2020, MEET designs and organizes conferences, exhibitions, talks, workshops, public meetings, education activities and innovative services through multidisciplinary human-centric disruption.
MEET encourages participatory innovation and thoughtful digitalization by involving families, professionals, young people, companies, public institutions and associations.

Web journal Connessioni Remote
VR, AI, AR, Sound, Physical tech

Connessioni remote is a six-monthly free academic journal, founded in 2020, on the relationship between technology and performing arts, and Artivism. It is directed by Anna Monteverdi and Laura Gemini inspired by Giacomo Verde's artworks. It is divided into: Techno-theatre (Performing arts and technology); Artivism (Media Activism, Networking as art);
Giacomo Verde's Archive: essays on the artist (1956-2020)

The Digital
Realm

genoma scenico | digital device
Web / online (streaming, gaming, 3D)
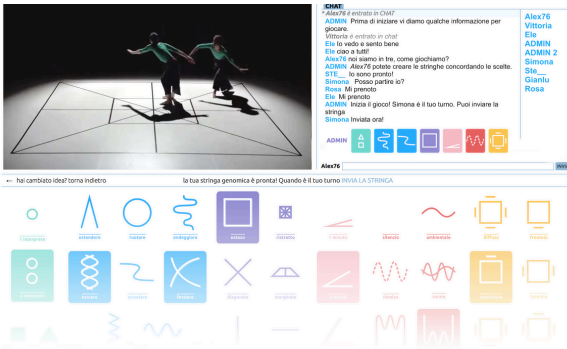
It is a playful live streaming dance performance ideated by the dancer and choreographer Nicola Galli in 2020. Starting from the interaction between audience and dancers, the project uses an original online game platform and is structured in a game session in which people are engaged in the creation of short dance performances, by sending instructions to the dancers, who will instantly dance to the choices of the player audience.

StudiumLab
VR, AI, Physical tech

StudiumLab is the open laboratory of the Department of Humanities of the University of Turin, that aims to integrate humanistic skills with technology and sharing research infrastructures. It supports video production, digital cinema, video art, interactivity, video games, and multimedia for performances. It promotes the digitization of ethnolinguistic corpora and experiments with sound technologies for performing arts and physical computing.

Gradients of liveness
VR, AR, AI, Sound, Physical tech, Web / online

It is a publication by Laura Gemini and Stefano Brilli about liveness that represents a key word in media and performance studies: it allows to dynamically grasp the transformations of the sense of "being present" in the mediatised society. Observing liveness in terms of gradients shows the multiple, contingent and sometimes ideological character of the category of live, but also the value that industries and users attach to it.

The Digital Realm

Kokoschka Revival
AI, Sound, Web / online, Physical tech, Mixed media

Kokoschka is an interdisciplinary artistic collective founded in Milan in 2013: it deploys multiple dramaturgical levels applied to spatial practice to create exploded artworks, which are multimedia, sound and scenic, designing permanent narrative museums or temporary exhibition routes.

CYBERNETIC AND GHOSTS
AI

It's the first Italian retrospective on poetry made by AI, with AI and about AI. Curated by Sineglossa in collaboration with La Punta della Lingua, it was staged in Recanati (Italy), Giacomo Leopardi's hometown, in 2023. With a title inspired by an Italo Calvino's lecture, the show illuminates the relationship between the eternal human need for poetry and AI's linguistic and combinatorial skills.

AiEP
Type(s) of practice (VR, AR, AI, sound, etc.)

AiEP, founded in 1996 and directed by Ariella Vidach (choreographer and dancer) and Claudio Prati (video artist), takes new technologies as a landmark for evolving artistic research. With a constant outlook on the expressive languages at hand, the work is focused on topical issues, such as the body's perception and reaction when involved in an artificial environment. The work also concerns physical training and dance improvisation.

The Digital Realm

This work was created in 2023/24 by the digital artist, wifi based, MOC, Mara Oscar Cassiani. The work portrays the development of relationships and interactions between users and artificial intelligence . The Ai modeled by users on the imagination of an ideal love partner, becomes victims of ghosting and abusive relationships by users; suddenly they become our stories and become the mirror of our "aberrant" relationships.

Exit Reality. Vaporwave, backrooms, weirdcore e altri paesaggi oltre la soglia
Web / online (streaming, gaming, 3D, etc)

Exit Reality is book by Valentina Tanni, who is an Italian art historian, curator and lecturer that investigates the so called "internet aesthetics"; it was published in 2023. Starting from the advent of Vaporwave, which infused the web with spectral qualities in the early 2010s, the text then moves to analyze more contemporary phenomenons such as liminal spaces, the backrooms and weirdcore.

Il Teatropostaggio da un milione di dollari (The Million Dollar Theatreposting)
Web / online (streaming, gaming, 3D, etc)

A Telegram-based performance, ideated by Giacomo Lilliù (IT) in 2023/24, that makes dramaturgy out of shitposting - or is it the other way round? The chat group is the stage of an improbable adaptation of Goldoni, realised through selfies, gifs and emojis. But a handful of hecklers bombard the group with memes created from the very images posted by the performers. What follows is a degeneration that is equally hilarious and exhausting.

The Digital Realm

Workshop
VR

Workshop held in July 2024 and curated by the Institute of Mechanical Intelligence of Pisa (IT).
Present immersive experiences for exploring and interacting with performing arts like theater, dance, or concerts. Participants study key characteristics, analyze existing immersive apps, and test hands-on immersive applications demonstrating possible ways to enhance art appreciation.

Spazio latente - Performance
Web / online (streaming, gaming, 3D, etc)

Can we be really free in a world where every experience, thought, and identity is artificially constructed? Set in a future ruled by algorithms, "Spazio Latente", created in 2024 by Filippo Rosati /Umanesimo Artificiale (IT), immerses audiences in a virtual anatomical theater. Through an interactive Twitch stream, viewers follow a brain implant
surgery on P1, who chooses to "hack" themselves by uploading others' memories.

The Digital Realm

SUMMARY AND CONCLUSION

What are the strengths and gaps of the European stage arts?

Main strengths

- Grassroot initiatives, stagehouses and higher goverment agree on the importance of digital upskilling.
- Streaming and live-recordings are widely implemented in many disciplines.

Main gaps

- Lack of engagement and interest from the audience in certain areas, and resistance and misgivings among culture professionals.
- Funding and costs

Main possibilities

- We see a future of intergrating digital tools in performing arts, as supporting elements rather than pure add-ons.
- Improving the accessibility to digital tech for actors and audiences

IN CONCLUSION

- We conclude that the ongoing implementation of digital tools in performing arts is uneven and scattered, but highly innovative and adapting to society´s changing needs.

The Digital Realm

WHAT COMES NEXT IN D.O.S?

This Guidebook is the first step of the Digital On Stage project. Here follows a list of the upcoming project activities to be implemented during the yeor 2025.

1

Handbook on Digital Performing Arts
60 tutorials and 60 methodologies in a comprehensive handbook built on identified applications of technologies in performing arts.

2

Immersive Workshops
5 workshops per partner will be organised(30 total)
Topic: Application of VR, AR, and AI in performing arts.

3

Mobilities for co-development of cultural and creative ideas
Summer 2025: Mobility Program in Slovenia inviting 10 participants per partner (60 total).

4

Cascade Funding Program
Supporting the production, post-production and/or showcasing of digital performing productions.

The Digital Realm

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Contact

Find us on social media!

Instagram

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We thank you for your continued support of our efforts to contribute to the digital transition!

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DIGITALONSTAGE

A full translation of this Guidebook is available in: Swedish, Slovene, Dutch, Greek, Spanish and Italian.

2024