Onassis Stegi

You and AI: Through the Algorithmic Lens

Curated by Irini Mirena Papadimitriou, Creative Director, FutureEverything
Commissioned and Produced by Onassis Stegi
24 June - 25 July, 2021 Pedion Areos - Athens

Throughout history, humans have imagined how artificial intelligence might transform society. How intelligent machines could make us more efficient, productive and predictable. What began as a dream has today become a reality. AI is everywhere. From personal and home devices and rapidly expanding into public space.

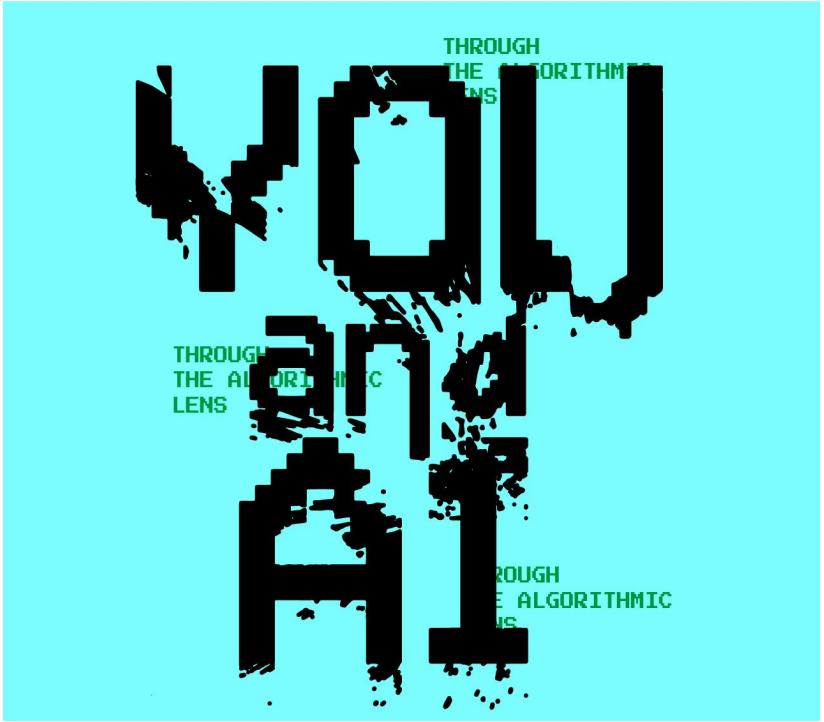
But as AI starts to shape our everyday lives, who shapes AI? And how are we affected by machine decision making we might not even be aware of?

You and AI invites you to explore work that challenges our fantasies of AI and opens up critical discussions about the increasing implementation of these systems and their impact on human subjectivity in the social, working and democratic contexts. Unfolding through three thematic areas, it is investigating ideas around AI, civic space and participation, how we perceive the world and are being seen through algorithms, and questioning the meaning of intelligence within AI.

Thematic Area 1 - AI, CIVIC SPACE, PARTICIPATION & DEMOCRACY

In a world dominated by algorithms and where AI is always watching – is everyone included? Or does the machine decide who should be seen and heard?

The first thematic area, *AI, civic space, participation and democracy*, presents works that show worlds through artificial, invisible systems and new digital bureaucracies. Worlds that are increasingly quantified and categorised by algorithmic systems, and where everything is redefined, accepted or excluded based on machine decision making systems and automation. Do we control the machine, or does the machine control us? Are we experiencing our surroundings differently through the eyes of the technologies that try to make sense of it?



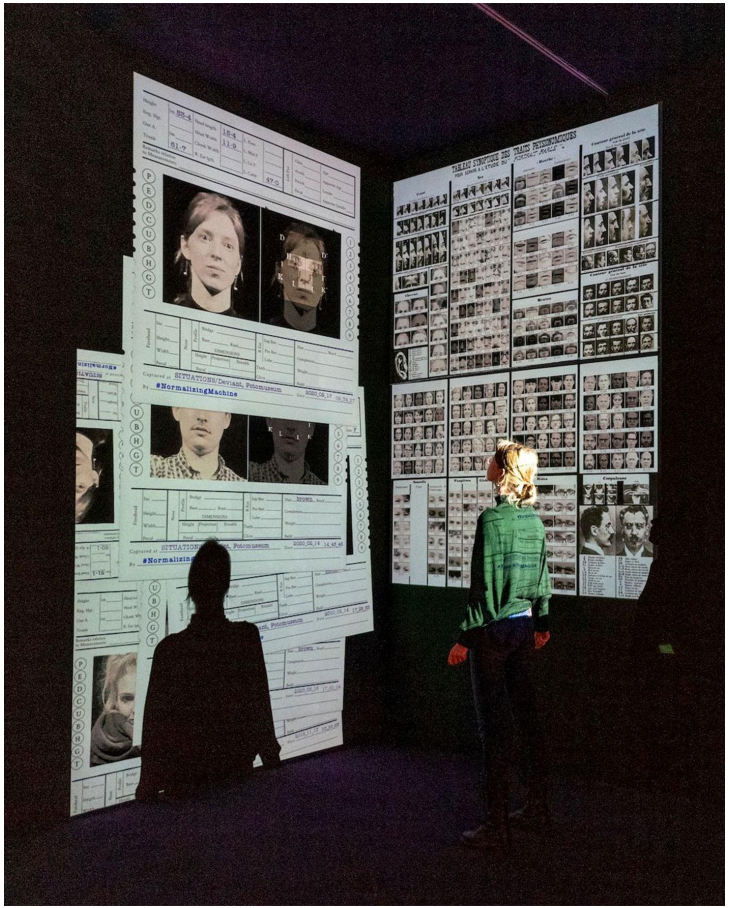
The Normalizing Machine
by Mushon Zer-Aviv, Dan Stavy and Eran Weissenstern

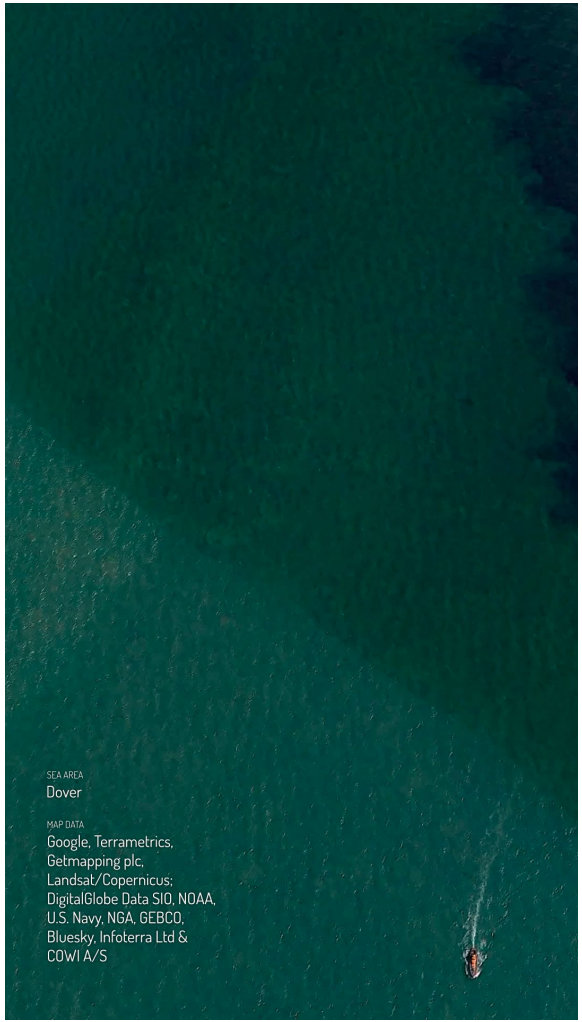
The Normalizing Machine is an interactive installation presented as an experimental research in machine learning. It aims to identify and analyse the image of social normalcy. Each participant is asked to point out who looks most normal from a line up of previously recorded participants. The machine analyses the participant's decisions and adds them to its aggregated algorithmic image of normalcy.

In the late 1800s the French forensics pioneer Alphonse Bertillon, the father of the mugshot, developed "Le Portrait Parle" (the speaking portrait) a system for standardising, indexing and classifying the human face. His statistical system was never meant to criminalise the face but it was later widely adopted by both the Eugenics movement and by the Nazis to do exactly that.

The work automates Bertillon's speaking portraits and visualises how today's systematic discrimination is aggregated, amplified and conveniently hidden behind the seemingly objective black box of Artificial Intelligence.

Mushon Zer-Aviv is a designer, researcher, educator and media activist, whos love/hate relationship with data informs his design work, art pieces, activism, research, teaching, workshops and city life..
Dan Stavy is a creative coder and media artist specialising in interactive installations using sensors.
Eran Weissenstern is a Software Engineer trying to bridge human and machine.





INSULAE [Of the Island] by Nye Thompson

Flying at drone height over glitching waves, UK artist Nye Thompson's *INSULAE [Of the Island]* contemplates the impact of island geography on national identity in the time of Brexit, through a perpetually looping digitally-reconstructed tour of the waters just off the British coastline. With the ocean as a metaphorical buffer between the UK and the rest of the world, the viewer is taken on a journey - endlessly circling the entire British mainland, obsessively patrolling these watery borders. The deeply emotive concept of the national border is re-framed as aesthetics through the distancing god gaze of the satellite imagery.

INSULAE was created using Google Earth – initially developed as a CIA global surveillance tool – this AI-powered imagery has the quality of looking like 'reality' but in fact it is a patchwork of data from different sources, processed, visually enhanced, artificially beautified and reconstructed by Google and the major satellite imaging suppliers. Artefacts and glitches become incorporated into the visual narrative, and fleeting moments are frozen, distorted and monumentalised. Some areas may be removed or obscured behind the scenes at the request of governments with sufficient political clout. So this vision of the world comes to echo the way a popular historical narrative is constructed: assembled from multiple sources, strategically enhanced but with key political agendas obscured.

Artist Nye Thompson (UK) is known for her experimental software architectures exploring network-embedded power dynamics and machinic visions of the world.

EVERY THING EVERY TIME by Naho Matsuda

EVERY THING EVERY TIME uses various datasets from sensors, timetables and schedules, it strips data from numeric values, location information and any data transmitting purpose and translates them into ephemeral, poetic narratives that give a glimpse into the ubiquity of technology in the urban space. On the electro-mechanical split-flap display appears real-time digital writing, which is drawing from the many ‘things’ and ‘events’ and changes of ‘status’ that are constantly happening in a city. What does data become without its informational value? And what happens to all the data that is collected from our ‘smart cities’?

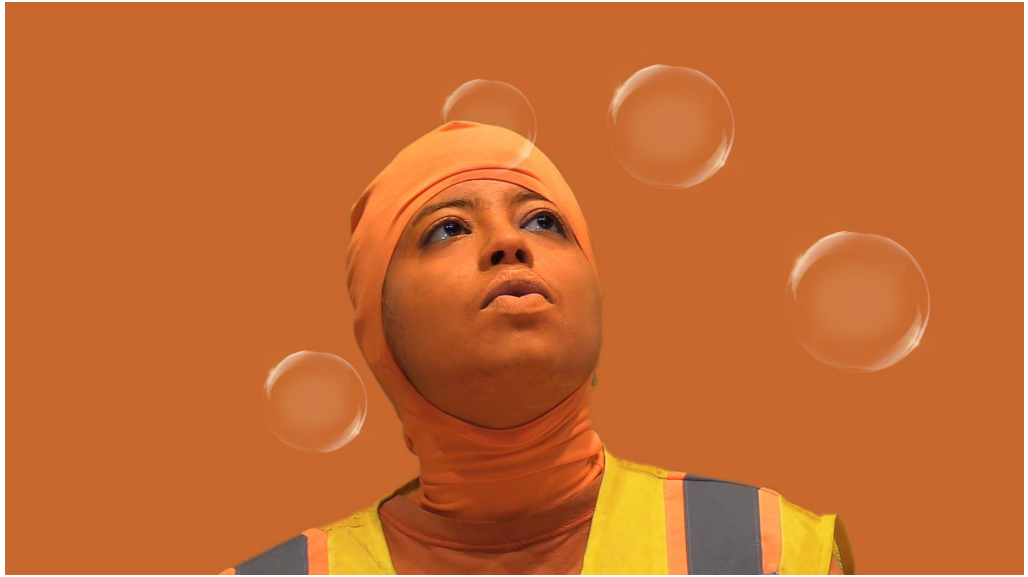
A meditation on the data that passes through the fabric of the city each day, EVERY THING EVERY TIME questions not only the role data has in our lives, but the use and value it has as it is collected. Can we see the urban landscape differently through the technologies that make sense of it?

Visit http://everythingeverytime.art/ for the Greek version of the poetic narratives.

Credits
Produced by FutureEverything. Developer: Dan Hett, Fabrication: RASKL, Split-flap software development: Paul Angus

Naho Matsuda is a German-Japanese artist, designer and researcher based in London, UK.

Abra by Hiba Ali



Ali, in their video, Abra, is in conversation with Amazon's customer-obsessed mascot, Peccy. Their discussion about working-class labour, surveillance and bubbles (economic, social and soap filled), literally paints the video orange. They contend that orange is the contemporary color of labour and surveillance, it is racialized and classed.

Credits
Directed and edited by Hiba Ali. Shot by Emily Pelstring, 2018

Hiba Ali is a producer of moving images, sounds, couture and words.

Voicing Erasure by Algorithmic Justice League

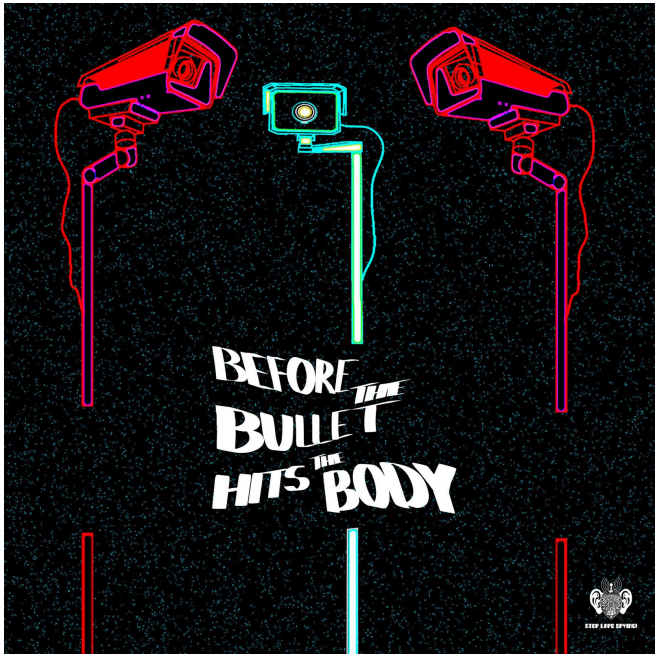
Is it okay for machines of silicon and steel or flesh and blood to erase our contributions? Is it okay for a machine to erase you and me? Is it okay for machines to portray women as subservient? Is it okay for Google and others to capture data without our knowledge? These questions and new research led by Allison Koenecke inspired the creation of *Voicing Erasure*, a poetic piece recited by champions of women's empowerment and leading scholars on race, gender, and technology.

Research that inspired Voicing Erasure:
Racial disparities in automated speech recognition - a recent research study led by Allison Koenecke reveals large racial disparities in the performance of five popular speech recognition systems, with the worst performance on African American Vernacular English speakers.

Credits
Poem "Voicing Erasure" by Joy Buolamwini
Music "Algorithms" by Chad Crouch
Editing by Alex GIlwit
Performers: Allison Koenecke, Joy Buolamwini, Kimberle Crenshaw, Megan Smith, Safiya Noble, Sasha Costanza-Chock, Ruha Benjamin

The Algorithmic Justice League (AJL) is a leading cultural movement towards equitable and accountable artificial intelligence. We now live in a world where AI governs access to information, opportunity and freedom.

Before the bullet hits the body by Bill Balaskas & Stop LAPD Spying Coalition



Before the bullet hits the body takes its title from the seminal 2018 report by the Stop LAPD Spying Coalition, which led to the dismantlement of the Los Angeles Police Department's (LAPD) "predictive" policing programmes. . The algorithm presented at Pedion tou Areos describes an area's predicted crime rate based on its historical average rate of crimes combined with recent trends. The Coalition's community organising expanded the critique of the LAPD's algorithm beyond just questioning the "feedback loop," showing how police use the veneer of science to mask their violence. Thus, exposing crime data as a social construct intended to contain, control and criminalise Black, brown and poor communities. The Coalition argued that surveillance and crime data create the conditions of police violence "before the bullet hits the body." Those conditions include incidents of police brutality like the 2020 killing of George Floyd, which led to global protests by the Black Lives Matter movement. The installation adopts the visual language of these protests, which included slogans written on major roads in the U.S. Along with the installation at Pedion tou Areos, the project consists of a curated presentation of the Stop LAPD Spying Coalition's work on Stegi's website and a series of online discussions.

Bill Balaskas is an artist, theorist and educator, whose research is located at the intersection of contemporary politics, digital media and visual culture.
The Stop LAPD Spying Coalition is led by community members from diverse backgrounds, including youth, formerly incarcerated people, academics, undocumented immigrants, unhoused people, artists

Technologies of Hope: 100 Responses to the Pandemic by Stephanie Hankey and Marek Tuszynski (Online Experience)

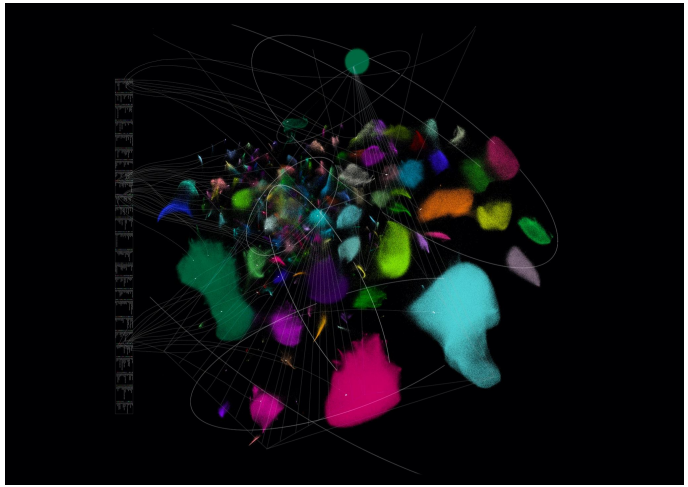
“Data is the Vaccine", says Volan, a company utilizing technologies –from drones, to smart buildings to bracelets – in order to assist humanity to recover. 'Technologies of Hope: 100 Responses to the Pandemic' is an artistic and research project that takes viewers on a journey through the world of one hundred such companies. Paying attention to their visual and verbal language, it sheds light on the costs of proposed ‘back to normal’ scenarios and a ‘no touch future’. The project examines how the specific technologies being promoted observe, screen, enforce and attempt to modify humans and the spaces they move within, mediating the relationship between body, architecture and geography. Taking into consideration how techno-solutionism based on machine learning becomes the new modus operandi, this interactive piece explores how freedoms are threatened in the name of safety. 'Technologies of Hope: 100 Responses to the Pandemic' ultimately asks: What can we learn about the current collective neurosis from the technologies that we accept into our lives? When have we gone too far, and how far are we willing to go? Is it possible that in our efforts to contain the virus, we succeeded instead in containing the host?

Production: Tactical Tech

The work was produced during the “Geographies of AI” residency program at Onassis Stegi in the context of the European ARTificial Intelligence Lab 2020 residency program.

Stephanie Hankey and Marek Tuszynski investigate the impact of technology on society and its relationship to social, environmental, and political issues.

The Wandering Mind: You start to wonder whether it’s a dream by slow immediate (Online Listening Experience)



slow immediate is the creative studio of Gershon Dublon and Xin Liu.

Credits
The artists acknowledge the generous support of Ars Electronica Linz and the European ARTificial Intelligence Lab, which granted the artists a residency in 2019. The Wandering Mind was produced with engineering support from Nicholas Gillian and Nan Zhao / Nayo. Research and development on the AI platform is underway at DVIC, Paris, with the support of Pôle Leonard de Vinci.

You start to wonder…
Here, under the blue sky, pink patterns filter through trees. Out there, the sounds of children playing, a bicycle squeak, a city churning.

…whether it's a dream.
Here, under yellow light, the dead of night. Out there, a heavy chill, an electric hum, an owl’s sharp shrill, a city suspended.
Rest at ease. This is not a park. It is a portal to all the parks in the world.

The Wandering Mind is an AI system for dream states. Sampling and recomposing tiny fragments of sound from thousands of global field recordings it finds online, the system generates a winding dream journey for sleeping audiences. In this Athens edition, we enter at Pedion tou Areos, a site where public sleep has had many faces. We respond to this year, in which stay-at-home orders have torn old social fabrics and mass uprisings have constituted new ones, and in which public parks have played a pivotal and transformative role.

We convene a collective action of sleeping together. Through a daily sound bath at sundown, we travel through parks and urban public spaces across the world, paying tribute to human habitats of social distance and safe gathering, makeshift shelter and tenuous refuge, mass uprising and fresh air. We invite you to affirm public space and everyone who occupies it by drifting to sleep wherever you find yourself.

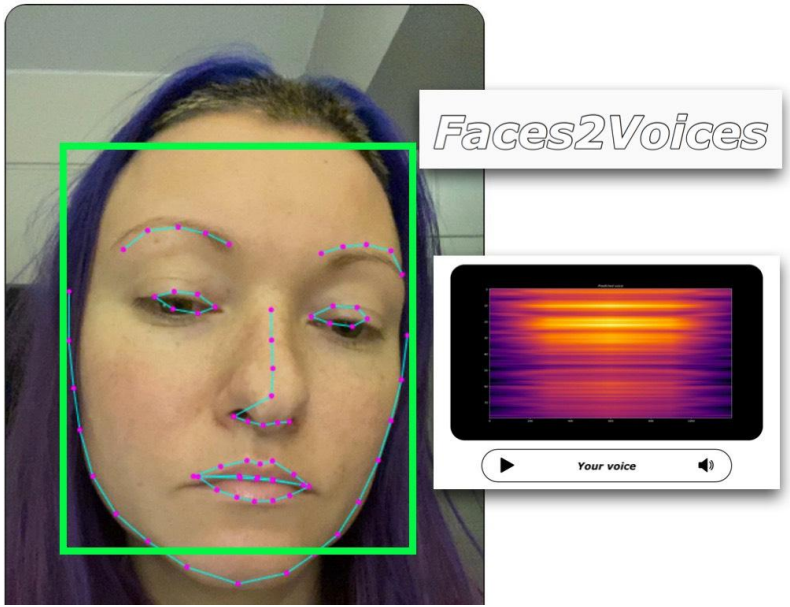
The Wandering Mind is online daily from 6pm - https://thewanderingmind.live

Faces2Voices by Helena Nikonole and Nikita Prudnikov (Online Experience)

Faces2Voices is an online interactive installation which uses facial recognition technology and AI-synthesised sound to create a generative music composition based on imaginary voices of online visitors. The composition is evolving in time depending on the contributions of people involved.

Lots of governments use surveillance technology as a way to control the spread of COVID-19. At the same moment, many citizens are ready to give up some privacy for the common good. But how can we define what level of privacy we should give up and how much data do governments really need to respond effectively? Faces2Voices focuses on critical approaches to AI technologies to explore exactly these kinds of questions.

Online visitors of Faces2voices.live can contribute to the project by granting access to their device's camera. AI then recognises faces, synthesises imaginary voices and adds them to the live stream.



Helena Nikonole is a new media artist, independent curator and educator interested in technological progress and its implications.

An Interview with ALEX (Online Experience)

An Interview with ALEX is a 12-minute, guided, interactive experience that engages the participant in a job interview with ALEX, a powerful artificial intelligence HR employed by a speculative tech giant called “Open Mind Corporation.” Through a science-fiction lens, the experience reveals how AI, and the gamification of work can be used as subtle tools of control in the interest of those in power.

Credits

The project is supported by Mozilla’s 2019-2020 Creative Media Awards and was launched online in the summer of 2020.

Selected by MozFest as part of You & AI: Through the Algorithmic Lens programme, alongside activations by the MozFest community that broaden and deepen people’s understanding of AI and its impact.

Carrie Sijia Wang is a New York-based artist working in interactive experience, video, and performance.

POV: Points of View by Alton Glass (Online - Mozilla Hubs Experience)

Los Angeles 2025. As an Insighter, you have been requested to review Case File 456.23 at the Federal Drone Headquarters.

The case centers around 21-year-old Cassius Moore, a gifted Black coder, who qualifies for early release under a new drone-surveillance program after serving two years in prison for biometric hacking. In this program, the government assigns F.E.N.I.X. AI--a drone that is equipped with artificial intelligence and weapons to record Cassius' every move.

Follow F.E.N.I.X. and the former engineering student as they navigate the world together. Your task is to evaluate how machine driven data and human driven biases impact the algorithms and outcomes in law enforcement.

This online experience will be available at Mozilla Hubs.

Credits
Selected by MozFest as part of You & AI: Through the Algorithmic Lens programme, alongside activations by the MozFest community that broaden and deepen people's understanding of AI and its impact.

Alton Glass is a visionary entrepreneur who leads a talented team of new media gurus who are – tackling contemporary issues through immersive storytelling. He is the founder of GRX Immersive Labs.

THEMATIC AREA 2 – SEEING & BEING SEEN THROUGH ALGORITHMS

AI is not neutral. So who holds the power? And how does bias in the machine shape our society?

Artworks in the second section, *Seeing and being seen through algorithms*, are exploring how algorithmic systems can usually interpret what they see in limited or monocultural ways, just like humans often do. AI is not neutral. Could we learn with machines to better understand our cosmos? Can AI become more fair or diverse?

Zizi - Queering the Dataset by Jake Elwes

Zizi - Queering the Dataset aims to tackle the lack of representation and diversity in the training datasets often used by facial recognition systems. The video was made by disrupting these systems* and re-training them with the addition of drag and gender fluid faces found online. This causes the weights inside the neural network to shift away from the normative identities it was originally trained on and into a space of queerness. *Zizi - Queering the Dataset* lets us peek inside the machine learning system and visualise what the neural network has (and hasn't) learnt. The work is a celebration of difference and ambiguity, which invites us to reflect on bias in our data driven society.

*A Style-Based Generator Architecture for Generative Adversarial Networks (2019)

The *Zizi Project* (2019 - ongoing) is a collection of works by Jake Elwes exploring the intersection of Artificial Intelligence (AI) and drag performance. Drag challenges gender and explores otherness, while AI is often mystified as a concept and tool, and is complicit in reproducing social bias. *Zizi* combines these themes through a deep fake, synthesised drag identity created using machine learning. The project explores what AI can teach us about drag, and what drag can teach us about AI.

Zizi was originally commissioned by Experiential AI at Edinburgh Futures Institute.

Jake Elwes is an artist living and working in London, UK. His recent works have looked at machine learning and artificial intelligence research, exploring the code, philosophy and ethics behind it.

Learning to See by Memo Akten

An artificial neural network looks out onto the world, and tries to make sense of what it is seeing. But it can only see through the filter of what it already knows. Just like us. Because we too, see things not as they are, but as we are.

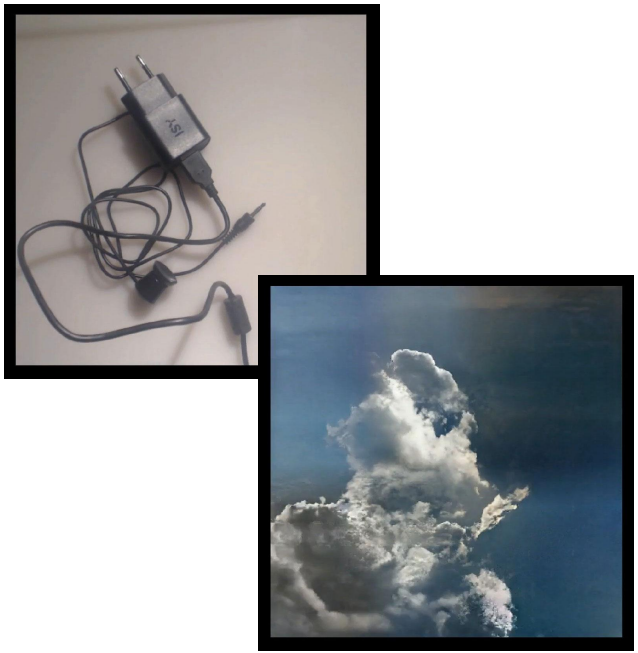
In this context, the term seeing, refers to both the low level perceptual and phenomenological experience of vision, as well as the higher level cognitive act of making meaning, and constructing what we consider to be truth. Our self affirming cognitive biases and prejudices, define what we see, and how we interact with each other as a result, fuelling our inability to see the world from each others' point of view, driving social and political polarization. The interesting question isn't only "when you and I look at the same image, do we see the same colors and shapes", but also "when you and I read the same article, do we see the same story and perspectives?".

Everything that we see, read, or hear, we try to make sense of by relating to our own past experiences, filtered by our prior beliefs and knowledge.

In fact, even these sentences that I'm typing right now, I have no idea, what any of it means to you. It's impossible for me to see the world through your eyes, think what you think, and feel what you feel, without having read everything that you've ever read, seen everything that you've ever seen, and lived everything that you've ever lived.

Empathy and compassion are much harder than we might realize, and that makes them all the more valuable and essential.

Learning to See is an ongoing series of works that use state-of-the-art machine learning algorithms to reflect on ourselves and how we make sense of the world. The picture we see in our conscious mind is not a mirror image of the outside world, but is a reconstruction based on our expectations and prior beliefs.



Memo Akten is a computational artist, engineer and computer scientist working with emerging technologies to create images, sounds, experimental films, large-scale responsive installations and performances.

Deep Meditations: A Brief History of Everything in 60 minutes by Memo Akten

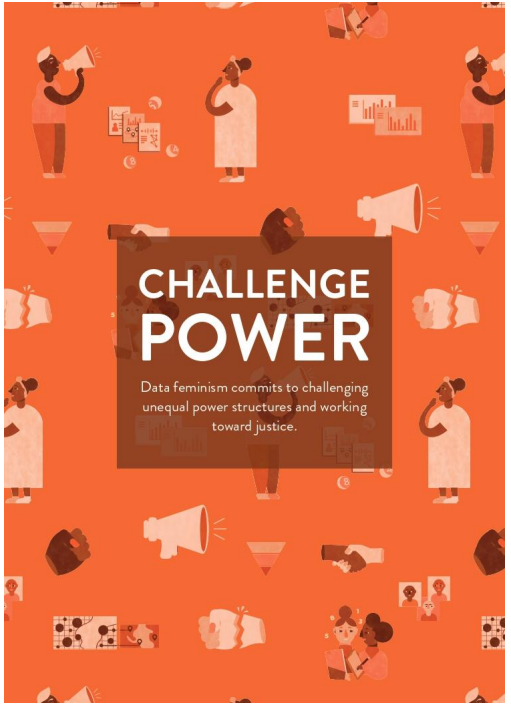
Deep Meditations: A brief history of almost everything in 60 minutes is a large-scale video and sound installation; a multi-channel, one hour abstract film; a monument that celebrates life, nature, the universe and our subjective experience of it. The work invites us on a spiritual journey through slow, meditative, continuously evolving images and sounds, told through the imagination of a deep artificial neural network.
We are invited to acknowledge and appreciate the role we play as humans as part of a complex ecosystem heavily dependent on the balanced co-existence of many components. The work embraces and celebrates the interconnectedness of all human, non-human, living and non living things across many scales of time and space – from microbes to galaxies.

What does love look like? What does faith look like? Or ritual? Worship? What does God look like? Could we teach a machine about these very abstract, subjectively human concepts? As they have no clearly defined, objective visual representations, an artificial neural network is instead trained on our subjective experiences of them, specifically, on what the keepers of our collective consciousness thinks they look like, archived by our new overseers in the cloud. Hundreds of thousands of images were scraped (i.e. autonomously downloaded by a script) from the photo sharing website flickr, tagged with these words (and many more) to train the neural network. The images seen in the final work are not the images downloaded, but are generated from scratch from the fragments of memories in the depths of the neural network. Sound is generated by another artificial neural network trained on hours of religious and spiritual chants, prayers and rituals from around the world, scraped from YouTube.

The Data Feminism Infographic by Catherine D’Ignazio, Lauren F. Klein, Marcia Diaz Agudelo

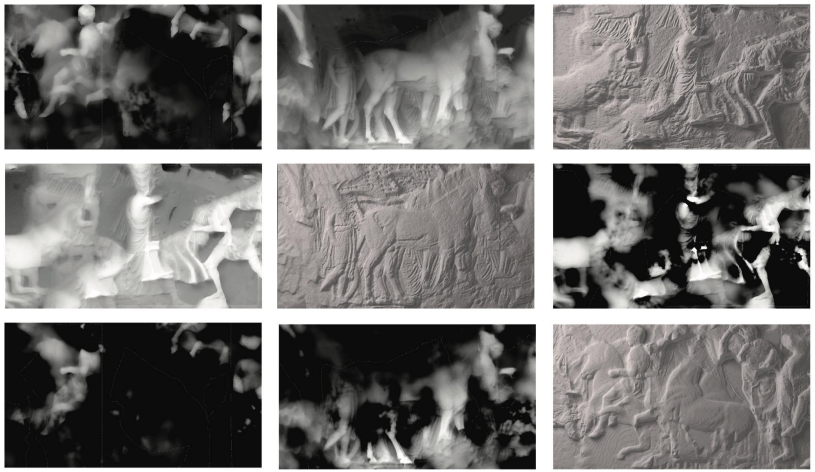
As data are increasingly mobilised in the service of governments and corporations, their unequal conditions of production, their asymmetrical methods of application, and their unequal effects on both individuals and groups have become increasingly difficult for artificial intelligence (AI) researchers--and others who rely on data in their work--to ignore. But it is precisely this power that makes it worth asking: "AI by whom? AI for whom? AI with whose interests in mind? These are some of the questions about AI that emerge from a larger project we call data feminism, a way of thinking about data science and its uses--including in AI research--that is informed by the past several decades of intersectional feminist activism and critical thought. As part of this project, we offer seven principles of data feminism: Examine power, Challenge power, Elevate emotion and embodiment, Rethink binaries and hierarchies, Embrace pluralism, Consider context, and Make labor visible. We have described these principles in a book, *Data Feminism* (MIT Press, 2020). Here we present these principles as an infographic, offering a visual call to action for those who seek to resist and/or reimagine AI research. The principles point to how, for example, challenges to the male/female binary can help to challenge other hierarchical (and empirically wrong) classification systems; how an understanding of emotion can expand the possibilities for AI research; how the concept of invisible labour can expose the significant human efforts required by AI systems; and why the data never, ever “speak for themselves.”

The goal of this infographic, as with the project of data feminism, is to model how research can be transformed into action: how feminist thinking can be operationalized in order to imagine more ethical and equitable data practices.



Catherine D’Ignazio is a scholar, artist/designer and hacker mama who focuses on feminist technology, data literacy and civic engagement.
Lauren Klein is an associate professor in the departments of English and Quantitative Theory & Methods at Emory University, where she also directs the Digital Humanities Lab.
Marcia Diaz Agudelo is a Colombian-Canadian Designer, Illustrator and Motion graphics artist.

Content Aware Studies by Egor Kraft



Content Aware Studies explores the potential of artificial intelligence (AI) and machine learning (ML) to reconstruct and generate lost historical artefacts from Greek and Roman history. In the era of ubiquitous computation, how might methods involving data, AI, ML and other forms of automation turn into semi- or quasi-archeological knowledge production, interpreting our history and culture?

In *Content Aware Studies*, an algorithm capable of self-learning analyses 3D scans of sculptures and friezes in an effort to replenish lost fragments. Based on its analysis of the scans, the algorithm generates fragment models which are then 3D printed in various materials and used to fill the voids of the original sculptures and their copies.

Some of these algorithmic outputs are turned into new machine-fabricated sculptures, uncanny in their algorithmic integrity. They render the work of synthetic agency that lends a faithful authenticity to the forms, while also producing bizarre errors and algorithmic normalisations of forms previously standardised and regulated by the canon of Hellenistic and Roman art.

Interdisciplinary artist and researcher Egor Kraft (b.1986, Leningrad) lives and works in Berlin and Moscow. His practice spans across media, science, critical research, philosophy and art.

Credits
Technical assistance, Artem Konevskikh

#WhenWordsFail by Stephanie Dinkins

It is easy to believe that words are the pinnacle of human expression. Yet, art, song, dance, gesture, ritual, sport, stillness, violence, letting go, and so on, can invite and allow for expressions that are less filtered and more open than words typically are.

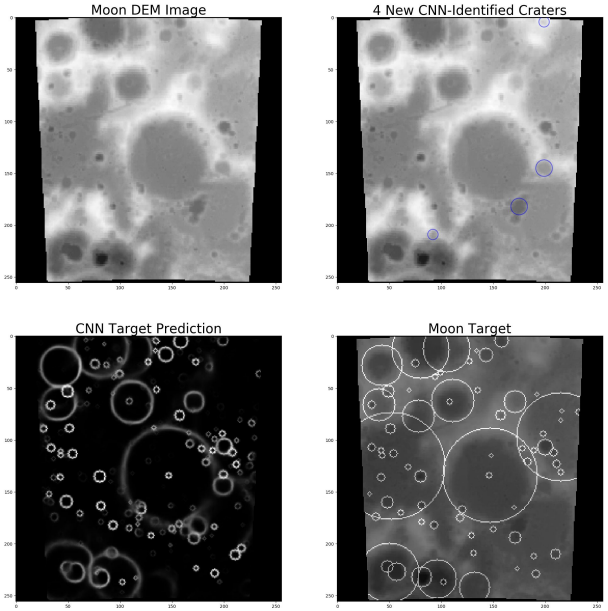
#WhenWordsFail is a WebXR experience that creates space for the nonverbal expression of feelings bubbling just below the surface. Words are often inadequate to express the depth and often invisible impact of our experiences. What happens when words are not enough? How do you express yourself? How is meaning made and understood?

#WhenWordsFail provides the public space to add expression to public discourse. It honours ways of knowing and feeling customarily masked by the perceived efficiency of words. It is a collective argument and evidence for the way we are feeling now.

Credits
Platform engineer, Sidney San Martin
Engineer, Neta Bomani

Stephanie Dinkins is a transmedia artist who creates platforms for dialogue about race, gender, aging and our future histories.

Counting Craters on the Moon by Kyriaki Goni



The video, part of the homonymous multimedia installation, presents an imaginary encounter between acclaimed Johann Friedrich Julius Schmidt (1825-1884) and neural network DeepMoon. DeepMoon was developed in March 2018 at the Canadian Institute for Theoretical Astrophysics University of Toronto. Julius Schmidt became in 1958, director of the new National Observatory of Athens in Greece, where the clear skies were very suited to astronomical observation. Both of them set out to count lunar craters, which due to the lack of atmosphere on the Moon remain unchanged for billions of years and thus provide valuable information for the past and possibly the future of our near solar system.

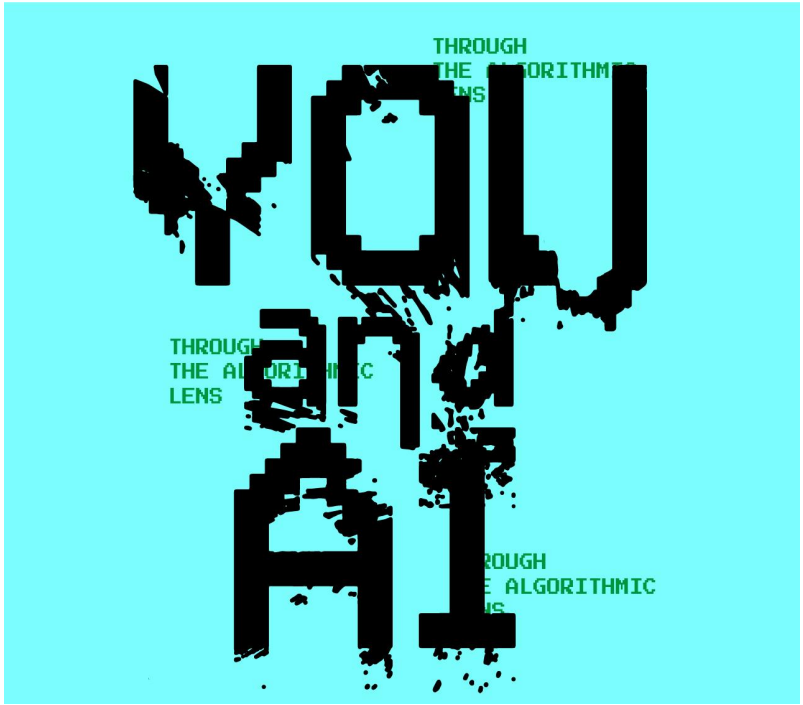
Julius Schmidt dedicated 35 years of his life and produced one of the most detailed lunar maps with around 30.000 craters, while DeepMoon spotted around 7.000 craters in less than 24hrs. In their dialogue they discuss precision, error, dedication, technique, nomenclature, loneliness and patterns.

The artist collaborated with the DeepMoon team, who kindly provided the dataset to be part of the installation and ran the neural network on Schmidt's map, which the artist digitally stitched together from 25 separated sections.

Speculating upon the possible synergies between human and machine, this work is an invitation to imagine how we can learn from and with machines in order to build different, multiple and, possibly, collective understandings of the surrounding world and its cosmos.

Kyriaki Goni is an Athens born and based artist. Through multimedia installations she critically touches upon questions of datafication, surveillance, distributed networks and infrastructures, human and other-than-human relations.

THEMATIC AREA 3 – ARTIFICIAL, INTELLIGENCE & NATURE



Can AI help us understand other types of 'non-human' intelligence and build a better balance with nature?

The final part of the exhibition, Artificial, intelligence and nature, raises questions around intelligence, creativity and our relationship with other species. In a contradictory way, AI as a consuming power of huge amounts of energy and environmental and human resources, it is often being deployed to understand or respond to environmental change. Can AI help us reimagine human and non-human relationships, “better” the planet, or recover lost species?

CUSP by Jake Elwes

A familiar childhood location on the Essex marshes (UK) is reframed by inserting images randomly generated by a neural network (GAN) into this tidal landscape.

Initially trained on a photographic dataset, the machine proceeds to learn the embedded qualities of different marsh birds, in the process revealing forms that fluctuate between species, with unanticipated variations emerging without reference to human systems of classification.

Birds have been actively selected from among the images conceived by the neural network, and then combined into a single animation that migrates from bird to bird, accompanied by a soundscape of artificially generated bird song. The final work records these generated forms as they are projected, using a portable perspex screen, across the mudflats in Landermere Creek. The work both augments and disrupts the natural ecology of the location, as flocks of native birds enter a visual dialogue with these artificial ones.

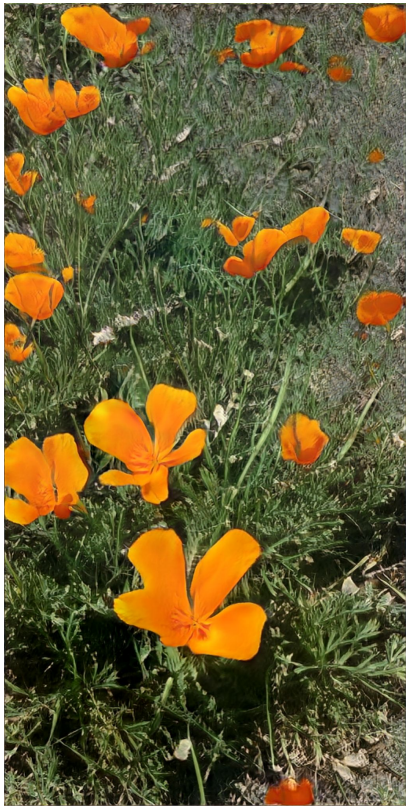
Credits
Camera: Toby Elwes
Machine learning models: Progressive Growing of GANs for Improved Quality, Stability, and Variation (2018)
WaveNet: A Generative Model for Raw Audio (2016)

Datasets: LSUN Construction of a Large-scale Image Dataset using Deep Learning with Humans in the Loop (2015)
Customised dataset of marsh bird images from Flickr community (2019)

Special thanks: The machine learning community, in particular at Nvidia and Deepmind.
Maitreyi Maheshwari and the team at Zabludowicz Collection.

Jake Elwes is an artist living and working in London, UK. His recent works have looked at machine learning and artificial intelligence research, exploring the code, philosophy and ethics behind it.

Circadian Bloom by Anna Ridler



Circadian Bloom is a screen-based visual clock that tells the time through flowers. Inspired by Carl Linneas's concept of a flower clock, a planted garden that would tell the time through the circadian rhythms of plants, this piece only shows flowers that have the quality of being able to keep time, blooming at the appropriate point of the day. Constructed using a series of complex algorithms and working with a machine that can keep time to an atomic level, visually it obscures this accuracy and forces the viewer to contemplate other, non-human ways of telling time and how conceptually time works.

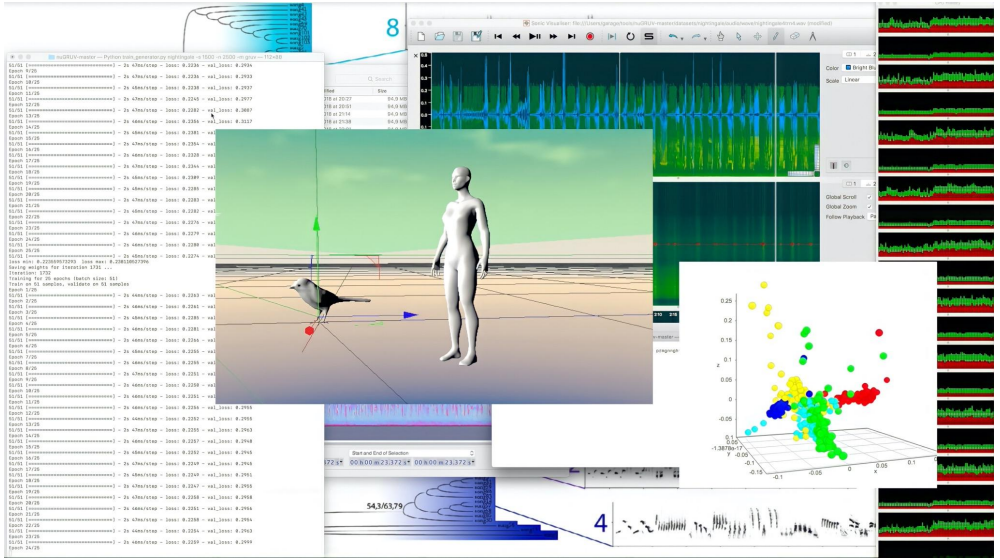
Anna Ridler is an artist and researcher who works with systems of knowledge and how technologies are created in order to better understand the world. She is particularly interested in ideas around measurement and quantification and how this relates to the natural world.

photo credit: Bella Riza

Bird Language by Helena Nikonole

Bird Language explores the possibilities of artificial intelligence within the context of bio-semiotics. In the work, artificial intelligence is looking for patterns within bird sounds to build a mathematical model of the structure of bird language. In the first stage of the project, the artist trained a neural network on the sounds of nightingales to create communication between non-human agents: birds and artificial intelligence. This is a metaphor for communication between nature and technology in which a human being is not necessary. The second stage of the project is the creation of an AI-translator from bird language to human language. AI reveals the language structure and lets us deconstruct the bird language into a series of phonemes, which we can use to build an AI-translator for interspecies communication. In this case AI is not only a mediator or interface between human beings and birds but rather an organ or full partner, semiotically active. It helps to understand bird's subjectivity through the language. The multichannel sound installation represents sound experiments from different stages of the project.

Credits
Neural networks design: Nikita Prudnikov



Helena Nikonole is a new media artist, independent curator and educator interested in technological progress and its implications.

Encounters with Aquatic Chimeras – Entangled Others (Sofia Crespo x Feileacan McCormick)

Where do the boundaries between creatures lie? What makes a jellyfish different from, say, an insect? We can look to their respective environments, their shapes and their material or even their behaviours. No matter the angle we approach, much of how we sort our modern world starts with the visual. Before we could use genetics or had methods for systematic study, groupings usually lay in the rough visual appearance.

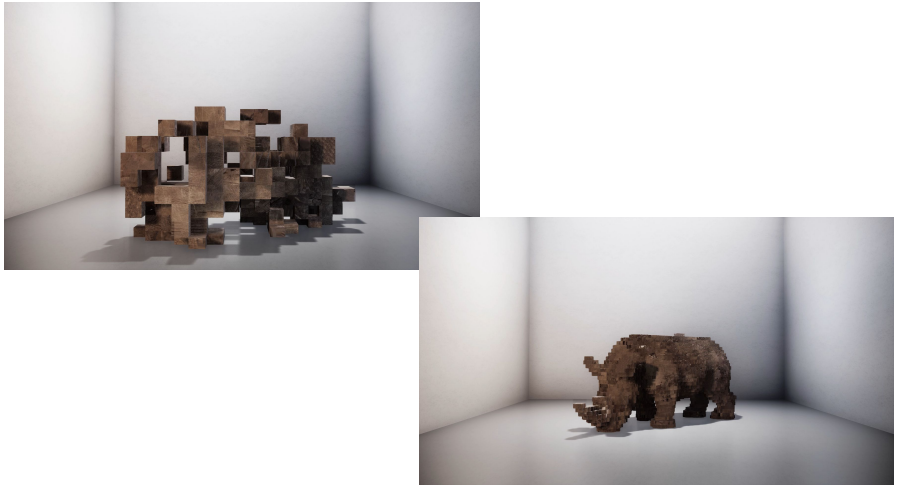
Yet, even in times when we only had rudimentary observations as a basis for our worldview, stories of chimeras – fantastic creatures of hybrid origin – were told. Today, such chimeras are generally left in the realm of science fiction, but when we dive into aquatic biodiversity with deep learning, we're offered the potential to explore and imagine new worldviews. To re-enact tales of chimeras by machine generating encounters with fantastic organisms.

Entangled Others is the shared studio practice of artists Feileacan McCormick and Sofia Crespo. Their work focuses upon ecology, nature and generative arts, with an emphasis on giving the more-than-human new forms a presence and life in digital space.

The Substitute by Alexandra Daisy Ginsberg

On March 20, 2018, headlines announced the death of Sudan, the last male northern white rhinoceros (Ceratotherium simum cottoni). We briefly mourned a subspecies lost to human desire for the imagined life-enhancing properties of its horn, comforted that it might be brought back using biotechnology, albeit gestated by a different subspecies. But would humans protect a resurrected rhino, having decimated an entire species? And would this new rhino be real?

The Substitute explores a paradox: our preoccupation with creating new life forms, while neglecting existing ones. A northern white rhino is digitally brought back to life, informed by developments in the human creation of artificial intelligence (AI). Based on research from AI lab DeepMind, the rhino performs as an artificial agent, an autonomous entity that learns from its environment. A life-size projection, 5m wide, shows the artificial rhino roaming in a virtual world, becoming more “real” as it comprehends the limits of the space. As the artificial rhino habituates to its space, its form and sound toggle from pixelation to lifelike — reminding the viewer that this living, breathing rhino, coming to life without its natural context, is entirely artificial. The experimental data is played on a second screen, showing the path and development of grid cells. The rhino’s behaviours and sounds are adapted from rare research footage of the last herd, provided by Dr Richard Policht. Is this rhino, coming to life divorced from its natural context, a better substitute for the real?



Dr Alexandra Daisy Ginsberg is an artist examining our fraught relationships with nature and technology.

Credits

Alexandra Daisy Ginsberg (Johanna Just, Ness Lafoy, Ioana Man, Ana Maria Nicolaescu). The Mill (Art Director: Adam Parry; Executive Producer: Jarrad Vladich; Senior Producer: Kelly Woodward; Animation Supervisor: Paul Tempelman; Animators: Kieran Jordan, Maxime Cronier, Kevin O’Sullivan, and James Hickey; Unreal Developers: Roberto Costas, Mark Dooney, Haydn Roff, and Ed Thomas; Model and Rig: Andreas Graiche and Daniel Weiss). Sound: Chris Timpson, Aurelia Soundworks.

Special thanks to Andrea Banino/DeepMind and Dr. Richard Policht.

nimiia cétiï by Jenna Sutela

Jenna Sutela works with words, sounds and other living media, such as Bacillus subtilis nattō bacteria and the “many-headed” slime mold Physarum polycephalum.

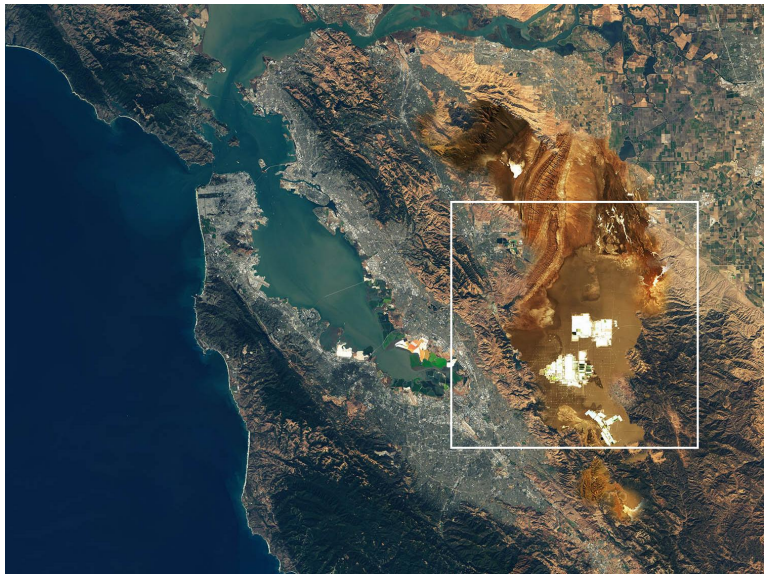
nimiia cétiï is an audiovisual work by Jenna Sutela using machine learning to generate a new written and spoken language. This language is based on the computer’s interpretation of a Martian tongue from the late 1800s, originally channeled by the French medium Hélène Smith. In the work, the language is voiced by Sutela, as well as the movement of Bacillus subtilis nattō, an extremophilic bacterium that, according to recent spaceflight experimentation, can survive on Mars. In this project, the machine is a medium, channeling messages from entities that usually cannot speak. The work is also about intelligent machines as aliens of our creation.

Credits

nimiia cétiï was created in collaboration with Memo Akten and Damien Henry as part of n-dimensions, Google Arts & Culture’s artist-in-residence program at Somerset House Studios. Thanks to Kieran Bates from the Institute of Zoology at Imperial College London, Adam Laschinger for sound recordings, and Manus Nijhoff and Leïth Benkhedda for 3D work. The video includes music with Miako Klein in contrabass recorder and Shin-Joo Morgantini in flute, with sound production by Ville Haimala.

Excerpts from Asunder by Tega Brain, Julian Oliver, Bengt Sjölén

There is a growing interest in the application of artificial intelligence (AI) to critical environmental challenges. *Asunder* responds to this by situating this approach as a literal proposition. The project combines state-of-the-art climate and environmental simulation technology, a 144 CPU supercomputer and machine learning image-making techniques, to realise a hypothetical 'environmental manager'. This environmental manager proposes and simulates future alterations to the planet to keep it safely within planetary boundaries, often generating completely unacceptable or absurd results. In doing so, *Asunder* questions assumptions of computational neutrality, our increasingly desperate reach for techno-solutionist fixes to planetary challenges, and the broader ideological framing of the environment as a system.



Credits:
Asunder was commissioned by the MAK for the VIENNA BIENNALE 2019.

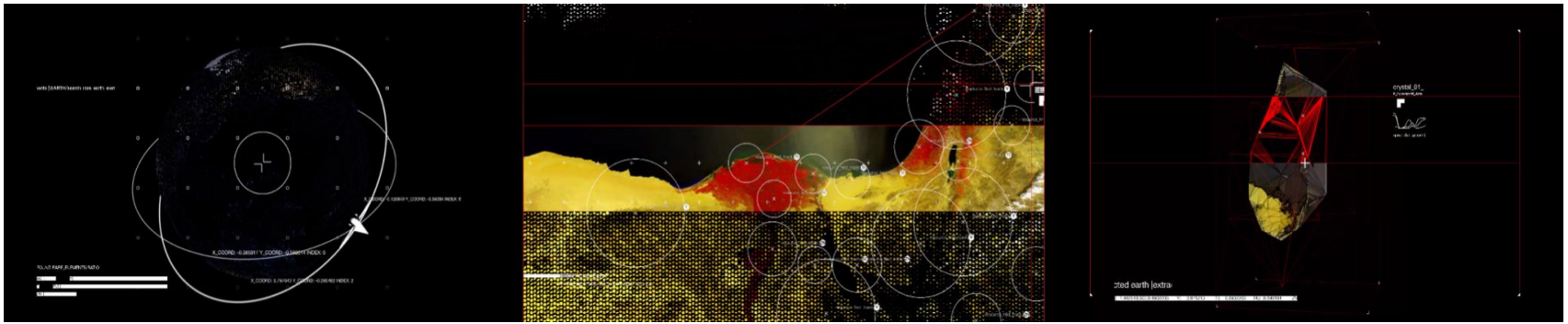
Tega Brain is an Australian born artist and environmental engineer whose work examines issues of data, ecology and infrastructure.
Julian Oliver is a Critical Engineer, artist and activist based in Berlin. Exhibiting since 1996, his projects and lectures have been presented at many museums, international electronic-art events and conferences.
Bengt Sjölén is an independent software and hardware designer/hacker/artist based in Stockholm and Berlin with roots in the Atari demo scene.

HYPERMINER_EXTRACTED EARTH by Frederik De Wilde (Online Experience)

HYPERMINER_EXTRACTED EARTH explores the hyper extraction of natural and economically valuable resources using advanced mining acceleration technologies by the means of hyperspectral imaging, artificial intelligence and data-driven decision making.

Hyperspectral data from CUBESATs equipped with machine vision in outer space are already actively used to allocate deposits and natural resources on Earth with unprecedented accuracy and vision. As major discoveries of near-surface mineral deposits are declining globally, new methods are needed to detect economical deposits at great depths. However, this is challenging due to the relatively small size of ore deposits, the limited number of existing geological data at depth, and limitations of the geophysical methods used for their detection. Machine learning can aid in developing better models for the prediction of rock type and economical mineral deposit locations for extraction purposes without engaging in time and resource-intensive approaches. What is the impact, though, of this hyper accurate and accelerated resource allocation technologies on the natural environment?

HYPERMINER_EXTRACTED EARTH is a speculative artistic project, and inquiry, exploring extraction and automatisation by the means of artificial intelligence. The artwork, a triptych, shows the allocation, extraction and recomposition of the most valuable natural resources found. The result is a new geode representing an extracted earth.



The work was produced during the “Geographies of AI” residency program at Onassis Stegi in the context of the European ARTificial Intelligence Lab 2020 residency program.
Frederik De Wilde is a Belgian conceptual artist exploring the inaudible, intangible, and invisible. He works on the interstice of art, science, and technology in physical and digital spaces and critically questions the impact of technology in society.

PARALLEL


YOU and AI
THROUGH
THE ALGORITHM
LENS
THROUGH
THE ALGORITHM
LENS

It’s Not YOU, it’s Me by Ilan Manouach (Online Experience)

It’s Not YOU, it’s Me is an art intervention taking place simultaneously in the media, online and as a big scale, site specific installation. The piece investigates how AI is changing the dynamics of self-representation and identities, and how technological mediation produces its own types of performativity and practices of othering. Through a communication campaign, the project invites members of the audience to post a selfie, by attaching to the #greece2021 - this is an existing hashtag, part of a media campaign with the mission to celebrate the 200 years of modern Greece. *It’s not YOU, it’s me* occupies that very same hashtag space but instead, presents a collective snapshot of an “extended demos” consisting of both real and fake intensities: citizen selfies are mixed with decontextualized faces from other humans posted by globally distributed micro labor force, as well as synthetic faces of non-existing humans posted by programmed bots. The durational video work, presented through a large-scale screen installation, invites the viewer to negotiate meaning through different distributions of reality over fakeness in the latent space of a nationalist fiction.

Credits
Curated by José Luis de Vicente

Ilan Manouach is a researcher and a multidisciplinary artist with a specific interest in conceptual and post-digital comics.

I belong to myself by Evi Kalogiropoulou

“I Belong to Myself” – the new short film by Evi Kalogiropoulou – takes us into a dystopian workplace at the Perama shipyards, where a longstanding ban on physical contact has turned human interactions into otherworldly simulations. The suppression of touch among the workers has alienated their communication, transforming the boatyard into a charged landscape of alienation and repressed sensuality that goes beyond stereotypical heteronormative desires.

Hinting at the existence of an omnipresent but invisible monitoring mechanism that runs the boatyard, the film follows the story of Giorgos (Giorgos Mazonakis) – one of the older workers, and manager at the yard – to profile human relationships and exchanges as shaped by everyday lives in which the visual subordinates the emotional.

EVENTS

On Art AI Conference (Online)

29th & 30th June 17:00-21:00 (EEST)

Athens, Greece

On Art & AI is a two-day conference exploring how artists engage critically, conceptually and artistically with discourses around artificial intelligence (AI), creativity, intelligence, labour and ethics.

Taking place in the context of *YOU and AI: Through the Algorithmic Lens* festival programme, the conference unfolds through two strands; Creating with AI, and Reflecting on AI.

The first strand, on day 1 of the conference, is exploring AI and creativity, as well as artistic applications of artificial intelligence, machine learning, neural networks and other emerging technologies. Artists have used and experimented with computers and computational processes since the 1950s, and in recent years we have seen technology taking an ever prominent role within the arts. Participating speakers, artists, theorists and curators in the sessions are sharing how they are engaging creatively and critically with these systems of knowledge, what new narratives they are constructing and what creative challenges they might be encountering.

Reflecting on AI, which is the subject on day 2 of the conference, includes conversations and talks that focus on the socio-political and cultural implications of AI. From the politics of machine learning training sets to algorithmic systems, power and powerlessness, participating speakers are invited to share how artists engage with and respond to these ideas and current issues. How creative practices and approaches could challenge inequalities, machine bias and algorithmic injustice, while exploring ideas of collaboration, collective knowledge and collective intelligence.

Participants: Anna Ridler // Suzanne Kite // Morehshin Allahyari // Stephanie Dinkins // Tamiko Thiel // Melanie Lenz // Jonas Lund // Sarah Allen // Hiba Ali // Lauren F.Klein // Mushon Zer-Aviv // Erinma Ochu // Joana Moll // Memo Akten // Marleen Stikker // Stop LAPD Spying Coalition // Bill Balaskas

The registration page for the On Art AI conference can be found here: https://form.jotform.com/211683490089361

AI Summer School

The Ethics of Disruption: From AI to Bioethics in Art and Research

5th - 7th July

Developing a functional and operational framework for the ethics of disruptive technologies, is increasingly becoming a key challenge for numerous research projects. AI becomes gradually a horizontal key enabling technology and progressively more research projects need to contemplate and act upon the use and application of such tech-tools. The use of AI poses both tremendous opportunities as well as challenges, not just in the way that AI research is designed and executed, but also in the ways that technology and knowledge should be best transferred in order to lead to ethically sound innovation.

In the same context, artistic works dealing with AI have the capacity to cut through the multiple layers of legal rules, codes of ethics and research practices to approach the problem holistically and at the most fundamental level. In that sense, it is necessary to approach and unpack such artistic practices as a corollary to the relevant science and innovation practices of AI-related research.

The Digital and Innovation Summer School 2021 explores the constituent parts of an ethics framework for approaching, understanding and regulating disruptive technologies focusing on responsible research and innovation. Spanning over a period of three days and using multiple formats (keynote presentations, round tables and e-lectures), it brings together world-class experts from the fields of Innovation, the arts, intellectual property, data protection and bioethics, who aim to explore ways to develop and operationalize a solid ethics framework for disruptive technologies. The school's overall ambition is to combine different disciplines and approaches and explore a multi-source approach for problems that defy pre-determined categories and pre-conceptualization analyzing the ethical challenges which come along with disruptive technologies.

The registration page for the AI Summer School can be found here:
https://www.onassis.org/whats-on/festival-you-and-ai-through-the-algorithmic-lens/the-ethics-of-disruption-from-ai-to-bioethics-in-art-and-research

CODED BIAS Film Screening and Q&A (Online)

Screening Date: 15 July, 16:00 (EEST)

Modern society sits at the intersection of two crucial questions: What does it mean when artificial intelligence (AI) increasingly governs our liberties? And what are the consequences for the people AI is biased against ? When MIT Media Lab researcher Joy Buolamwini discovers that most facial-recognition software does not accurately identify darker-skinned faces and the faces of women, she delves into an investigation of widespread bias in algorithms. As it turns out, artificial intelligence is not neutral, and women are leading the charge to ensure our civil rights are protected.

Coded Bias explores the fallout of MIT Media Lab researcher Joy Buolamwini´s startling discovery that facial recognition does not see dark-skinned faces and women accurately, and her journey to push for the first-ever legislation in the U.S. to govern against bias in the algorithms that impact us all.

The Coded Bias screening will be followed by a conversation between the film director Shalini Kantayya and You and AI: Through the Algorithmic Lens curator, Irini-Mirena Papadimitriou

The registration page for the CODED BIAS film screening can be found here: https://www.onassis.org/whats-on/festival-you-and-ai-through-the-algorithmic-lens/coded-bias

Zizi & Me (& Jake): A Cabaret Lecture

Event date: 12 July, 21:00 (EEST)

Drag Queens, Drag Kings, Drag Things and…. Artificial Intelligence (AI).

Join artist Jake Elwes and Me The Drag Queen as they walk us through the world of deepfake drag in The Zizi Project along with cabaret acts and a live drag queen host.

Drag challenges gender and explores otherness, while AI is often mystified as a concept and tool, and is complicit in reproducing social bias. Zizi combines these themes through a deepfake, synthesised drag identity created using machine learning. The project explores what AI can teach us about drag, and what drag can teach us about AI.

The registration page for the Zizi & Me Lecture can be found here:
https://www.onassis.org/whats-on/festival-you-and-ai-through-the-algorithmic-lens/zizi-me-jake-a-cabaret-lecture

The “You and AI” festival is part of the European ARTificial Intelligence Lab network co-funded by the Creative Europe programme of the European Union.