

Serpentine Arts Technologies

Serpentine Arts Technologies was established in 2013 to explore the impact of technology through art, research and experimental projects. It supports artists to produce projects that use advanced technologies and convenes people working in art, technology, law, policy, and academia to share knowledge and develop new ideas about technology and society.

The foundation of Serpentine Arts Technologies is an R&D platform that sits at the intersection of art, science and technology, developing artist-led research and innovation for the benefit of the public. Research strands include blockchain, AI, legal, life sciences and video games.

Since 2020 Serpentine Arts Technologies has produced Future Art Ecosystems. A project and publication encouraging knowledge-sharing and experimentation in the context of building 21st century cultural infrastructure: the systems that support the production, distribution and financialisation of art and advanced technologies while responding to important societal concerns.

2013

Serpentine is one of the first contemporary art institutions in the UK to appoint a curator dedicated to working with advanced technologies.

2014

First digital commission: **Cécile B Evans'** *AGNES*, a benevolent spambot who lived in the Serpentine website.

2015

First video game release: **Ian Cheng's** *Bad Corgi*, a mindfulness app where the user controls a pup tasked with herding sheep, avoiding distraction in a world of chaos.

2016

Launch of **James Bridle's** *Cloud Index*, a weather prediction model that correlates vast amounts of historic weather data with polling data on major political events, most notably the recent EU referendum.

Zaha Hadid: Virtual Reality Experiences opens at Serpentine North and is the first gallery sited Arts Technologies project, developed with **Zaha Hadid Virtual Reality Group** in partnership with **Google Arts & Culture**.

2017

First public experiments with decentralised technologies: *DAOWO (Decentralised Autonomous Organisation With Others)*, an award-winning Blockchain Lab and debate series for reinventing the arts with Furtherfield and Goethe Institut London.

2018

First UK solo exhibition by **Ian Cheng**: *BOB (Bag of Beliefs)*, an artificial lifeform whose behaviours, beliefs and emotional life were influenced by exhibition visitors, takes place at Serpentine South.

Launch of the Serpentine Arts Technologies Twitch channel that streams artist-led experiments with game engines and research.

2019

First R&D Platform projects are established with the creation of the Legal and Creative AI Labs that supports art and advanced technologies through research and legal resources.

Launch of *Augmented Architecture*, a global open call for new forms of architecture utilising augmented reality (AR) launched in collaboration with **Google Arts & Culture** and **Sir David Adjaye OBE** to coincide with the annual Serpentine Pavilion.

The Deep Listener by **Jakob Kudsk Steensen**, produced by Serpentine Arts Technologies, is an AR audio-visual ecological trail through Kensington Gardens and Hyde Park.

Hito Steyerl, *Actual RealityOS* an open source digital tool for data visualisation that brings together augmented reality, immersive audio and strategies of data collection and mapping for mobile devices

Suzanne Treister, *From SURVIVOR (F) to The Escapist (BHST)* a book and web AR project that explores imaginary scenarios of techno-human evolution based on research in artificial intelligence, cosmology and theoretical physics

I Magma by **Jenna Sutela** in collaboration with **Memo Akten** and **Allison Parrish**, co-commissioned with Moderna Museet. It is a machine oracle performing divinations on our collective futures.

2020

CONNECT, BTS, a series of major art projects in five cities on four continents initiated by South Korean pop group **BTS** launches with *Catharsis* by **Jakob Kudsk Steensen**, a digital simulation of a re-imagined old-growth forest.

Future Art Ecosystems 1: Art x Advanced Technologies draws on interviews with contributors including **Ian Cheng**, **Refik Anadol**, **Holly Herndon**, **teamlab** and more, examining the broader landscape of art and technology practice. It launched on 23 March

2020—the day the UK went into lockdown in response to the Covid-19 pandemic, resulting in a huge societal shift online.

The **Creative AI Lab** launches a public database to aggregate tools and resources for artists, engineers, curators and researchers interested in incorporating machine learning and other forms of artificial intelligence into their practices.

2021

Future Art Ecosystems 2: Art x Metaverse examines how the metaverse – an always-online ‘second’ world and emerging internet megastructure – represents a fundamental shift in our understanding of digital systems and physical presence.

Legal Lab Report 1: Art + Tech/Science Collaborations, explores how the law can better support collaborations between artists, organisations and companies across art, science and technology.

Artist Worlds, a series of commissions that supports artistic practices that engage with simulated realities, immersive story-telling and virtual world-building, launches with *Primal Tourism* by

Jakob Kudsk Steensen with **Rindon Johnson**, **Alenda Chang** and **Mikkel Rosengaard** on Twitch.

2022

Future Art Ecosystems 3: Art x Decentralised Tech identifies new patterns for organisational and creative innovation emerging from decentralised technologies including blockchain and addresses the possibilities for a more interoperable vision of the art world.

Danielle Brathwaite-Shirley's *WE CAN'T DO THIS ALONE*, a live improvised play and video game using eye-tracking and other emerging technologies is an example of early-stage creative R&D supported by the programme.

Hivemind, a knowledge game for artists to navigate the inner workings of their practice is developed with **Trust**. Artists including **Trust**, **Danielle Brathwaite-Shirley**, **Libby Heaney** and **Fannie Sosa** reveal their artistic process using *Hivemind* live and on Twitch.

Synthetic Ecologies Lab launches *Compendium*, a growing archive of resources, reflections, sketches, conversations, and content that support artistic and critical inquiry into ecology and life sciences.

GODMODE (ep. 1), a new interactive audiovisual performance by artist duo **dmstfctn** is staged at Serpentine South. It is set within a real-time simulation of a supermarket like those used to train AI to operate cashier-less supermarkets.

2023

Third World: The Bottom Dimension by **Gabriel Massan & Collaborators**, launches as a video game, a collaborative exhibition and web3 tokens powered by Tezos.

The *Artist Worlds* Twitch programme expands to include live playthroughs of virtual worlds and video games created by artists including **DMSTFCN**, **Keiken** and **Libby Heaney**.

Serpentine Arts Technologies, Art Night and N.E.O.N Digital Arts co-commission *THE LACK: I KNEW YOUR VOICE BEFORE YOU SPOKE* by **Danielle Brathwaite-Shirley**, an art video game set in a post-apocalyptic world with which audiences interact and perform to rebuild the world together.

First public experiment with a new economic approach called Partial Common Ownership as part of **Tomás Saraceno's** exhibition *Web(s) of Life* at Serpentine South through an evolving artwork that links the imagination of children of Salina Grandes in Argentina and London.

The first *Beyond Cultures of Ownership* (un)conference in collaboration with **RadicalxChange**, **Dark Matter Labs** and **Somerset House Studios** convenes attendees from technology, civic and art fields to explore and strategise how art and culture can play an active part in reconfiguring ownership.

2024

Waluigi's Purgatory was a new interactive audiovisual performance by artist duo **dmstfctn**, featuring an original soundtrack composed and performed live by **Evita Manji**, co-curated with **HQI**.

Future Art Ecosystems 4: Art x Public AI zooms in on the emerging landscape of AI technologies as they impact the creative economy and society at large. With insights from leading voices in art, tech industry and government policy, it maps the risks and opportunities in building and integrating various elements of AI systems within the cultural domain.

The Call, a collaboration with artists **Holly Herndon** and **Mat Dryhurst** proposes new cultural, legal, and technical rituals for art in the age of AI. *The Call* centres on developing new protocols and materials for the creation of choral AI models.

In collaboration with **RadicalxChange**, a Partial Common Ownership blockchain system called **PCOArt** is released as an opensource tool. It is a new system that allows artists, communities and holders of art to create structures of shared ownership and value distribution that better reflect those living relationships.

Fairclouds – a creative R&D project on alternative economics developed with **Tomás Saraceno** and **RadicalxChange** in collaboration with Indigenous communities in Argentina. The

project offers a platform for community-led resistance to resource extraction, inviting global contributors to support land stewardship and now lives as an open beta website.

Two PhD awards, to Victoria Ivanova and to Alasdair Milne, based on research hosted by and conducted in collaboration with Serpentine Arts Technologies. The focus of the doctorates was on innovation strategy in cultural organisations, and the novel uses of AI in artistic practices.

2025

The Choral Data 'Trust' Experiment White Paper, written by Victoria Ivanova and Jennifer Ding, presents findings from the Choral Data 'Trust' Experiment, an initiative to test new approaches to governing AI training data through a real-world case study with 15 UK choirs developed as part of **Holly Herndon** and **Mat Dryhurst's** *The Call*.

Under the Cloud is a publication compiling research gathered between 2021-23 by several groups of artists, curators, media theorists, and anthropologists during their field study in the Guizhou province of Southwest China, one of the eight national 'big data hubs'. The publication documents these explorations into the real-world implications of techno-industrial policy that increasingly aims to optimise data and computing capabilities to adopt artificial intelligence.

Future Art Ecosystems 5: Art x Creative R&D, the fifth volume of the Future Art Ecosystems briefing series, charts the emergence of Creative R&D as a distinct domain integrating artistic experimentation, technological innovation, and cross-sector collaborations and offers concrete recommendations for its development and impact.

THE DELUSION by **Danielle Brathwaite-Shirley** combines satire and absurd humour with cooperative gaming and participatory theatre to explore the real-world impacts of societal division. Brathwaite-Shirley's most ambitious work to date, it features a new series of video games and works developed collaboratively over the course of 18 months with a team of artists, researchers, technologists and members of Danielle's Black Trans and Queer community.

Serpentine Arts Technologies Team, 2025

Tamar Clarke-Brown, Arts Technologies Curator

Tommie Introna, R&D Platform Producer

Victoria Ivanova, Future Art Ecosystems and R&D Strategic Lead

Eva Jäger, Arts Technologies Curator and Creative AI Lead

Vi Trinh, Assistant Arts Technologies Curator

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Kay Watson, Head of Arts Technologies