

# PST ART + AI

MAT 200A 2024 Fall  
Anna Borou YU

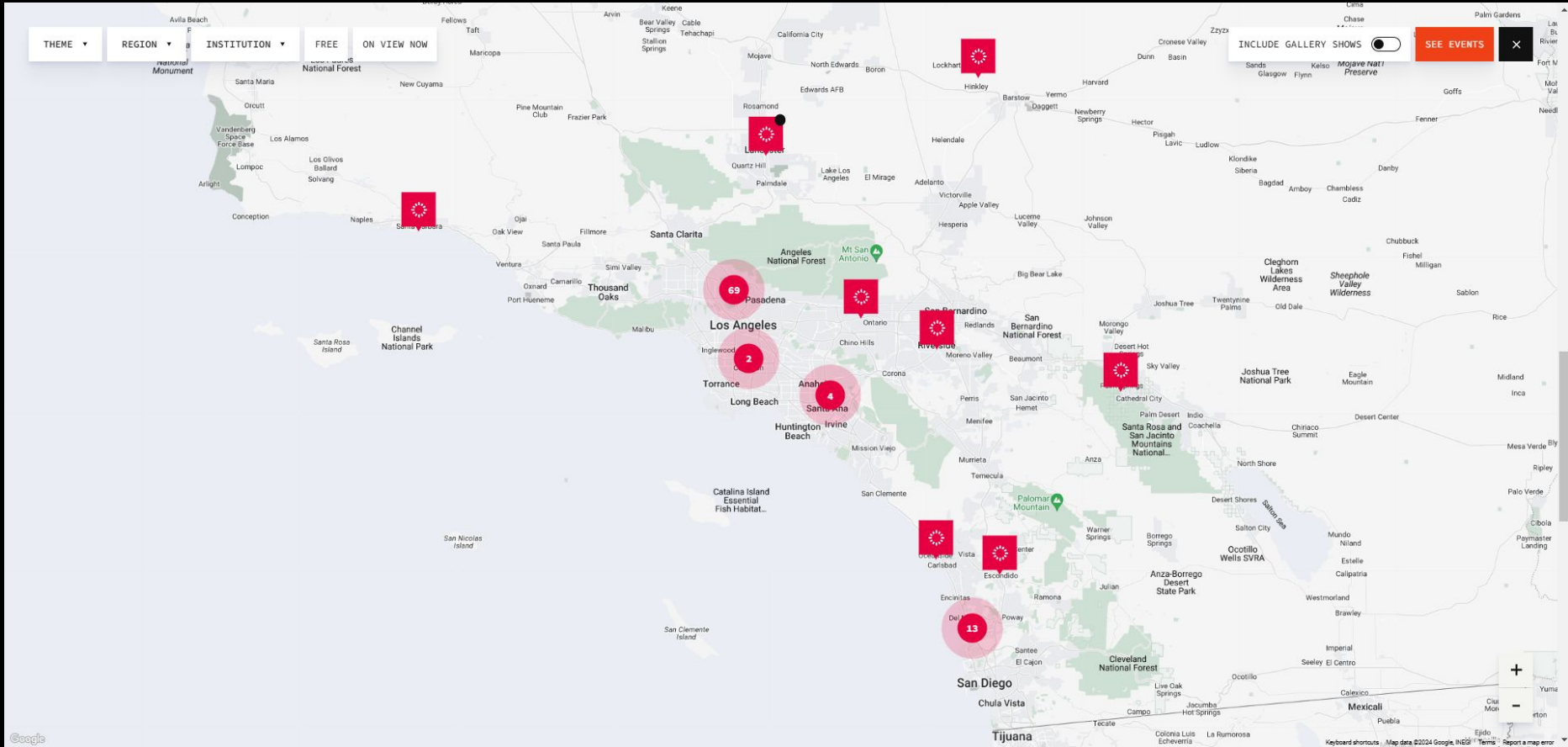
# EXHIBITIONS <sup>84</sup>

Explore all PST collisions of Art and Science here.

[THEME](#) ▾ [REGION](#) ▾ [INSTITUTION](#) ▾ [FREE](#) [ON VIEW NOW](#)

INCLUDE GALLERY SHOWS







Google

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SEE EXHIBITIONS

CATEGORY REGION INSTITUTION FREE



Past event  
**Embodied Pacific: Mural-  
 Canoe, Wander the  
 Wetlands**

KENDALL-FROST MISSION BAY MARSH RESERVE

84 Exhibitions  
300 Events  
N Symposiums



## EXHIBITIONS<sup>8</sup>

Explore all PST collisions of Art and Science here.

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EVENTS

Overview

Autry Outdoors

Community Partner Events

Conversations

Education

Family Activities

Film

Live Performances

Member Events

Native Voices

American Indian Arts Festival

PST ART x The Autry

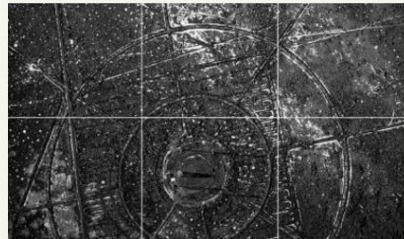
BUY TICKETS

## PST ART x The Autry

PST ART is one of the largest collaborative arts events in the country. It started in 2011 as Pacific Standard Time with the theme Art in L.A. 1945-1980. The second iteration Pacific Standard Time: LA/LA took place in 2017. Now it's back, re-named PST ART for 2024 with a collaboration 200,000 years in the making: Art & Science Collide. 800+ artists at 60+ cultural and scientific institutions throughout Southern California.

[PST ART: Art & Science Collide](#) includes exhibitions on subjects ranging from ancient cosmologies to Indigenous sci-fi, and from environmental justice to artificial intelligence. *Art & Science Collide* will share groundbreaking research, create indelible experiences for the public, and generate new ways of understanding our complex world. You'll see pigeons with backpacks monitoring air pollution, bees flying around an art museum, plants swaying to live winds on Mars, and an environmentally sustainable city designed for seven billion people.

### Exhibitions



Autry Museum 6 Exhibitions

<https://theautry.org/pst-art-x-the-autry>





# EXHIBITIONS<sup>5</sup>

Explore all PST collisions of Art and Science here.

THEME ▾ REGION ▾ INSTITUTION 62 ▾ FREE ON VIEW NOW

INCLUDE GALLERY SHOWS



LACMA 4 Exhibitions

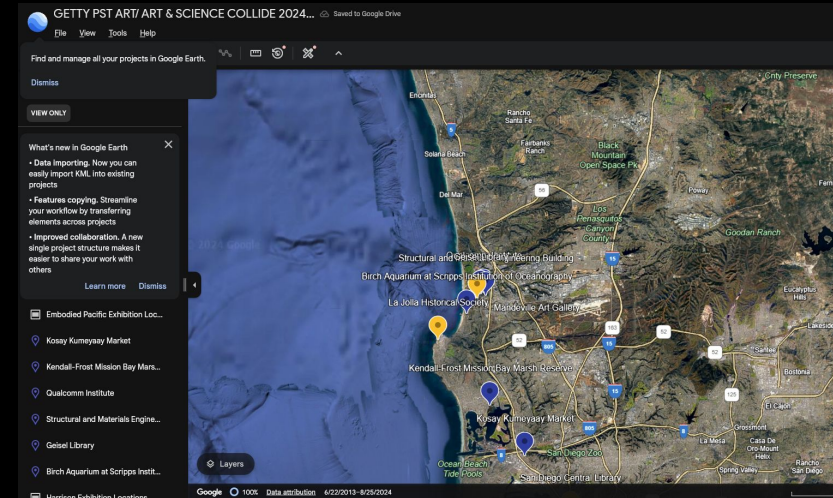
<https://www.lacma.org/currentexhibitions>

# EMBODIED PACIFIC

Immersive Oceanography, Indigenous  
Design, Critical Craft



Our Worlds (Klima S. Lattin and Catherine Eng), maay-ha, 2024. Image from the extended reality work Indigenous Worlds Are All Around You, 2023. Maay-ha (sky-ocean, cielo-oceano) is Kumeyayay for Creator.



## EMBODIED PACIFIC

<https://www.embodiedpacific.com/>

<https://earth.google.com/web/@32.9157892,-117.18150026,86.29748344a,80296.21986043d,30y,0h,0t,0r/data=CgRCAggBMikKJwolCiExY3h4U3ILNFBUWXI3aGR3bTI5NIRqWHFVb014bFplZ2sgAToDCgEwQgIIAEoHCP-N0TQQAQ>

PST ART and AI

# How many of the exhibitions have AI?

0-10% 20-30% 50-60% 90%-100%

# How many of the exhibitions have AI?

0-10% 20-30% 50-60% 90%-100%

AI

A.I.

Artificial intelligence

Machine learning

Deep learning

Machine intelligence

Artificial romance

LLM

Large language model

Large-language-model

Agency

Neural net

Generative adversarial network (GAN)

.....



Artwork Statement

Exhibition Statement

Catalogue

History

# Exhibitions on AI





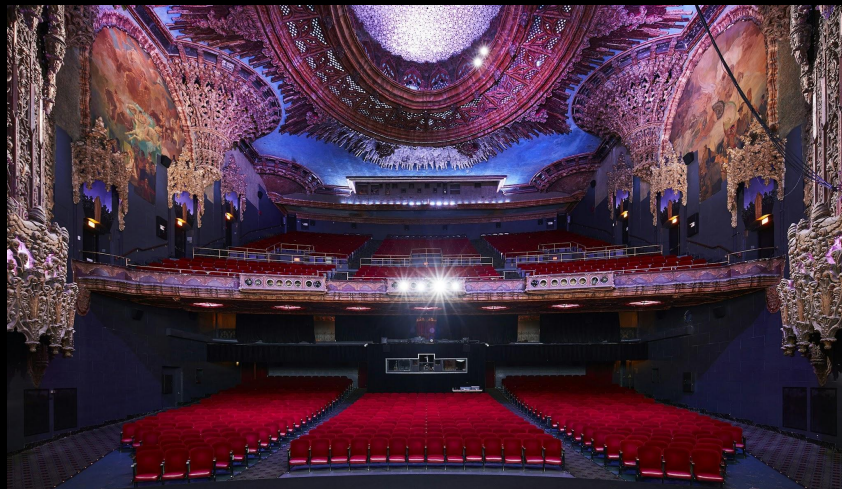
Performance on AI



Invertigo Dance Theatre

Turing Tests, Apples, and Queens: Collective Storytelling  
Through Fairy Tales and Artificial Intelligence

Caltech's Beckman Auditorium  
December 6-7, 2024



REDCAT and CAP UCLA

Live night: cruising bodies, spirits and machines: Public  
Programming

THE UNITED THEATER ON BROADWAY  
December 6-7, 2024

# Catalogue on AI



CROSSING OVER:

ART AND SCIENCE AT CALTECH 1920–2020

Edited by Peter Sachs Collopy and Claudia Bohn-Spector

Caltech Library, Pasadena



Counter Surveillance:

Control—Privacy—Agency

Edited by Marieke Drost and Joes Segal

Wende Museum



Digital Capture:

South California and the Pixel-Based Image World

Curated by Nikolay Maslov and April Baca

Netflix introduces its online streaming service, where paying subscribers can access and stream entire movies online.

2 0 0 8

Satoshi Nakamoto (a presumed pseudonym) publishes the white paper “Bitcoin: A Peer-to-Peer Electronic Cash System.”

2 0 0 9

The Bitcoin network comes online, with Satoshi Nakamoto mining the “genesis block” of Bitcoin (block number 0), which had a reward of 50 Bitcoin.

Minecraft is developed and introduced by Swedish game designer Markus “Notch” Persson.

James Cameron’s *Avatar*, noted for its groundbreaking use of stereoscopic 3D and motion-capture technology, sets a new benchmark for 3D cinema and digital visual effects and becomes the highest-grossing film to date.

2 0 1 0

Chelsea Manning, an intelligence analyst for the US Army in Iraq, leaks classified information related to widespread human rights violations to WikiLeaks.

Instagram, the online mobile photo and video sharing application and social media service, launches.

Microsoft’s Kinect for Xbox 360, a motion-sensing input device, marks a significant development in natural user interfaces in gaming and will widely influence VR and AR technologies.

Nam June Paik’s first major retrospective takes place at Tate Liverpool and FACT Liverpool, England.

Palmer Luckey, future founder of Oculus VR and the Oculus Rift, builds a prototype of a VR headset in his parents’ garage in Long Beach, California.

2 0 1 1

Federal authorities arrest computer programmer and political internet activist Aaron Swartz in connection with the unauthorized downloading of articles from the academic digital library JSTOR.

Apple introduces Siri, a built-in personal assistant feature, on the new iPhone 4S.

2 0 1 2

Syria’s government disconnects the nation from the internet for two days due to public uprisings.

Lytro releases one of the first consumer light field cameras, a technology that allows users to refocus images after they are taken.

*The Hobbit: An Unexpected Journey* is the first widely released film to use forty-eight frames per second (double the standard twenty-four), marking another step in digital filmmaking.

2 0 1 3

Google Glass, a head-mounted optical display, is one of the first consumer-facing AR devices.

Former US National Security Agency contractor and CIA employee Edward Snowden leaks thousands of classified documents to media organizations, exposing mass government surveillance

programs. These include, but are not limited to, data mining from citizens’ personal phone and internet records and the monitoring of electronic communications networks.

The movie *Her*, starring Joaquin Phoenix, depicts a man who falls in love with his computer’s artificial intelligence operating system, voiced by Scarlett Johansson.

2 0 1 4

Sony Pictures, Home Depot, JP Morgan, and eBay are hacked, prompting temporary chaos on their websites and jeopardizing sensitive user data.

The first known NFT (non-fungible token) artwork is created by Kevin McCoy and Anil Dash. It is a pixelated image of an octagon filled with shapes created by McCoy’s wife, Jennifer.

Amazon acquires Twitch, a live streaming platform for video gamers, for nearly \$1 billion, signifying the importance of online digital video content.

Facebook acquires Oculus VR, a leading virtual reality headset maker, for \$2 billion, signaling a significant investment and interest in the VR industry.

The concept of computational photography—deploying techniques such as artificial intelligence, machine learning, algorithms, or even simple scripts to capture and enhance images—gains wider prominence with the release of the Google Pixel smartphone.

2 0 1 5

The first Apple Watch is released. It incorporates Apple’s iOS system and sensors for environmental and health monitoring and becomes the world’s best-selling wearable device.

The Federal Communications Commission issues a landmark “net neutrality” decision, ruling that all data sent across the internet—regardless of user, content, or platform—should be treated as of equal importance.

2 0 1 6

Pokémon Go, a mobile AR game, is released and becomes a cultural phenomenon, significantly raising public awareness and adoption of augmented reality.

Google DeepMind’s AlphaGo program defeats a world champion in the board game Go, showcasing the power of AI, with implications for image processing and recognition.

Microsoft releases the HoloLens, a “mixed reality” (blending the physical and digital worlds) head-mounted display.

The video-sharing social networking application Douyin is created by Chinese tech firm ByteDance.

The introduction of the Samsung Gear 360 and similar cameras brings 360-degree photography and virtual reality to the consumer market.

2 0 1 7

OpenAI becomes the first artificial intelligence to defeat the world’s best-ranked Dota 2 player, Danil “Dendi” Zsutin, in a one-to-one game.

Adobe announces that its support of Flash—a multimedia software used for web animations, interactive applications, games, and digital art, but also laden with security vulnerabilities and generally a strain on computer memory resources—will end in 2020.

2 0 1 8

ByteDance releases TikTok, the global version of Douyin.

Google AI announces the development of Night Sight for Pixel phones, a feature that leverages AI and machine learning to dramatically improve low-light photography.

Microsoft launches Azure Machine Learning, a cloud service that manages machine-learning projects using trainable AI.

2 0 1 9

Google Wing Begins offering drone-based delivery services in selected areas of the United States.

The European Southern Observatory releases the first image of a black hole made using the Event Horizon Telescope, showcasing the latest developments of digital imaging in astrophysics.

AI-driven photo editing apps, among them Adobe Photoshop Camera, use machine learning to enhance photo editing.

Google announces that its quantum computer completed a computational task in two hundred seconds that would take a supercomputer ten thousand years.

2 0 2 0

Facebook agrees to pay \$550 million in a class-action lawsuit settlement regarding the collection of facial recognition data from users without their knowledge or consent.

The COVID-19 outbreak begins to spread worldwide, causing mass illness and death. Global technology sectors identify the

public health crisis as causing a significant disruption to the industry, even as the pandemic also leads directly to broader adoption of digital technologies for remote work, learning, health care, and entertainment.

The launch of 5G, the fifth-generation technology standard for cellular networks, enhances mobile connectivity and enables faster transmission of high-quality digital images and videos.

US Customs and Border Protection accepts a proposal to use Google Cloud technology to facilitate the use of AI in border surveillance. Google's CBP technology is used in conjunction with sentry towers operated by Anduril Industries, a conservative defense startup founded by Palmer Luckey of Oculus.

2 0 2 1

OpenAI releases DALL-E, which uses "deep learning" methodologies to generate digital images from descriptions of natural language (ordinary text).

Mike "Beeple" Winkelmann's NFT artwork Everydays: the First 5000 Days sells at a Christie's auction for \$69 million in cryptocurrency, making it the most expensive NFT ever.

The Apple AirTag, a tracking device, is released. It uses "ultra-wideband" frequencies uniquely suited to finding things (as opposed to, for instance, data transfer).

NASA launches the James Webb Space Telescope, equipped with advanced digital imaging technologies to observe the universe in unprecedented detail.

2 0 2 2

Nielsen reports that streaming has surpassed television viewing for the first time in history.

US Customs and Border Protection introduces the use of facial recognition technology for identity checks at thirty-two different border locations.

The San Francisco-based company OpenAI launches ChatGPT, an AI chatbot used to generate human-like text based on given prompts. OpenAI also introduces DALL-E 2, an AI model used to generate images from textual descriptions, and Whisper, a speech transcription model that converts spoken language into text.

The White House releases "Blueprint for an AI Bill of Rights," a guide to averting harm caused by artificial intelligence.

A Lockheed Martin jet is piloted by artificial intelligence software for more than seventeen hours, marking AI's first engagement on a tactical aircraft.

2 0 2 3

AI image-generation apps such as Lensa garner immense popularity.

OpenAI releases GPT-4, which delivers significant speed and accuracy improvements over previous large language models. GPT-4 also is capable of multimodal interactions, meaning that it can process multiple types of data (for instance text, images, and audio) together.

Apple announces the release of Apple Vision Pro, a mixed-reality headset that will be available in early 2024.

future

UNCERTAINTY

SELF-ORGANIZATION

tense

art,

complexity  
& uncertainty

FEEDBACK

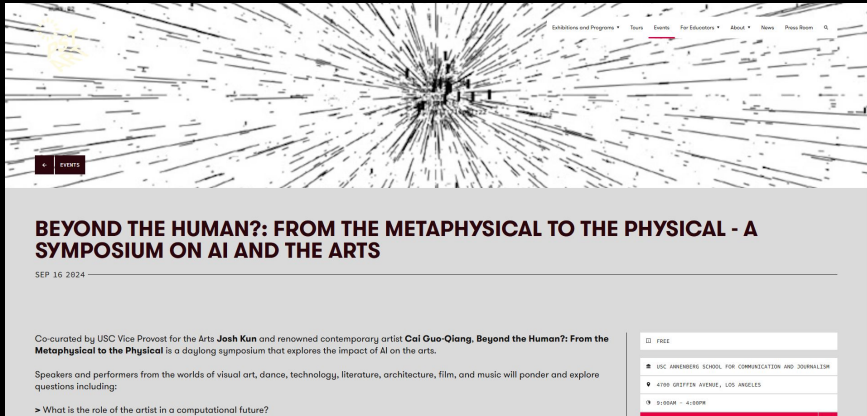
CHAOS

EMERGENCE  
aug 24

– dec 14, 2024



# Symposium on AI



Beyond the Human?: From the  
Metaphysical to the Physical  
<https://pst.art/en/events/beyond-the-human-from-the-metaphysical-to-the-physical-a-symposium-on-ai-and-the-arts>  
2024/09/16

Future Tense  
<https://futuretense.holo.mg/symposium/>  
2024/04/27

Exhibitions and Programs • Tours • **Events** • For Educators • About • News • Press Room

← EVENTS

## BEYOND THE HUMAN?: FROM THE METAPHYSICAL TO THE PHYSICAL - A SYMPOSIUM ON AI AND THE ARTS

SEP 16 2024

Co-curated by USC Vice Provost for the Arts **Josh Kun** and renowned contemporary artist **Cai Guo-Qiang**, **Beyond the Human?: From the Metaphysical to the Physical** is a daylong symposium that explores the impact of AI on the arts.

Speakers and performers from the worlds of visual art, dance, technology, literature, architecture, film, and music will ponder and explore questions including:

> What is the role of the artist in a computational future?

- FREE
- USC ANNENBERG SCHOOL FOR COMMUNICATION AND JOURNALISM
- 4700 GRIFFIN AVENUE, LOS ANGELES
- 9:00AM - 4:00PM

- > What is the role of the artist in a computational future?
- > What are the promises and perils of AI's expansion of what it means to be human?
- > What is AI's potential for moving us beyond human exceptionalism into realms of inter-species and inter-materialist consciousness?
- > Can AI move us beyond a singular self?
- > How does AI impact our sense of the physical?
- > How does AI imagine and enact the metaphysical?
- > How can artists use AI to build new worlds?

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Caroline A. Jones

Cybernetic Histories: Admonitions for GenAI



# Artists on AI



**Refik Anadol**

Digital Capture: Southern California and the Pixel-Based Image World

Seeing the Unseeable: Data, Design, Art

Beyond the Human?: From the Metaphysical to the Physical - A Symposium on AI and the Arts



**Sarah Rosalena**

All Watched Over by Machines of Loving Grace

Invisibility: Powers and Perils

Breath(e): Toward Climate and Social Justice



**George Legrady**

Seeing the Unseeable: Data, Design, Art

Digital Witness: Revolutions in Design, Photography, and Film

Digital Capture: Southern California and the Pixel-Based Image World

AI & Fiber Synthesis

# Artworks on AI

## How Artist use AI?

1 Multimodality

2 Chatbot

3 Visual Generation

4 Online Interaction

5 Sociology



## **1. AI-Driven Installations and Visualizations**

Refik Anadol: "California Landscapes: Generative Studies A" and "Machine Hallucination: Keystone-Mast Collection"

Andrea A. Trabucco-Campos and Martín Azambuja: "Artificial Typography"

Cai Guo-Qiang: "The Annunciation of cAI™" and "Painting a Wedding Portrait for Cai's Grandparents"

George Legrady: "AI & Fiber Synthesis"

Harshit Agrawal: "Masked Reality"

## **2. AI and Generative Storytelling**

Stephanie Dinkins: "Not the Only One, Avatar, V1"

Charmaine Poh: "In the shadow of the cosmic"

Kira Xonorika: "Deep Time Dance" and "Visions"

Micha Cárdenas: "Sin Sol / No Sun"

## **3. AI and Biologically Inspired Art**

INTERSPECIFICS: "Codex Virtualis, Emergence"

Laura Splan: "Baroque Bodies (Sway)"

## **4. AI and Ecological Narratives**

Tiffany Shlain and Ken Goldberg: "Tree #30" and other works from Ancient Wisdom for a Future Ecology

Michael Joo: "Composition OG:CR"

Ash Eliza Smith & Robert Twomey: "Fish Phone Booth"

Theresa Schubert: "Glacier Trilogy — Part 3: Simulating glacial water systems"

Ancient Wisdom for a Future Ecology: Trees, Time, and Technology

Cesar & Lois: "Being hyphaenated (Ser hifanizado)"

## **5. AI for Surveillance and Social Commentary**

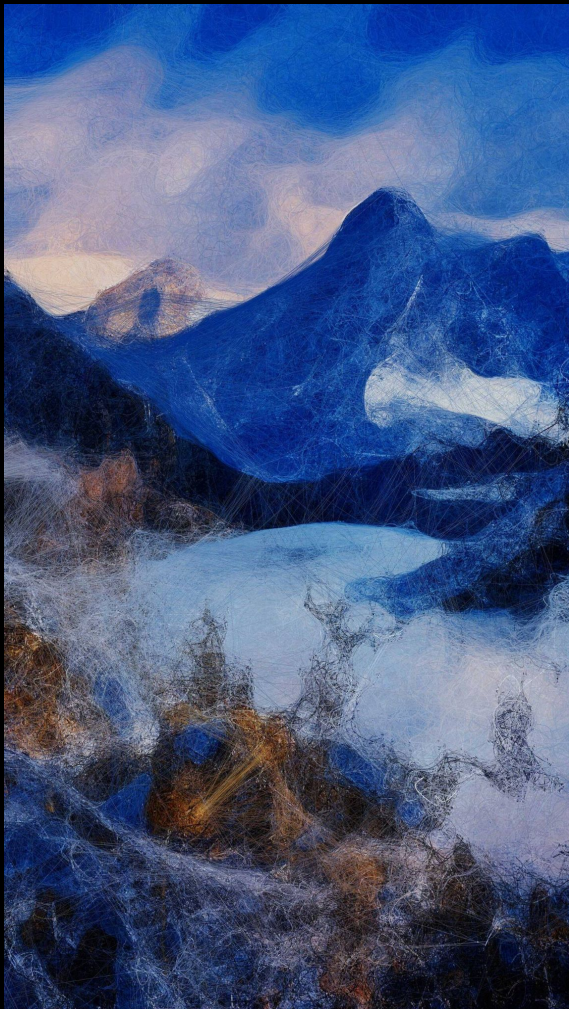
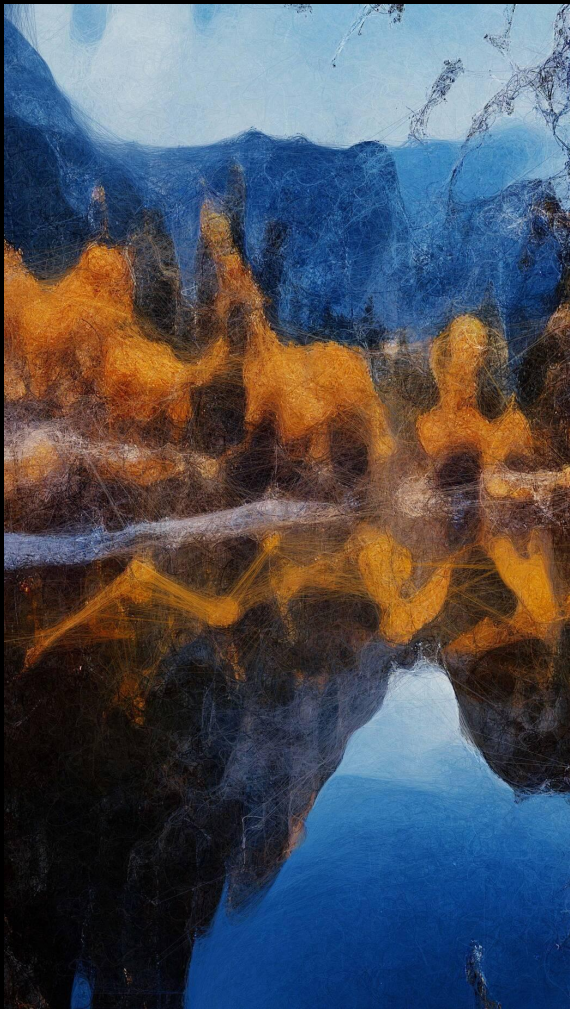
Operator: "Soft Evidence"

Adam Harvey: "DukeMTMC Datageist"

Trevor Paglen: "Image Operations"

Sondra Perry: "Double Quadruple Negative Etcetera"

# 1. AI-Driven Installations and Visualizations



Refik Anadol,

California Landscapes: Generative  
Studies A, 2023.

Seeing the Unseeable: Data, Design, Art  
ARTCENTER COLLEGE OF DESIGN



Refik Anadol

Machine Hallucination: Keystone-Mast  
Collection, 2024

AI data painting (23:10 min., silent)

Courtesy of the artist

Digital Capture: Southern California and the  
Pixel-Based Image World

UCR ARTS AT UC RIVERSIDE



Cai Guo-Qiang

WE ARE

Act IV: Birds of Paradise. Photo by Kenryou Gu.

the LA Memorial Coliseum



Cai Guo-Qiang

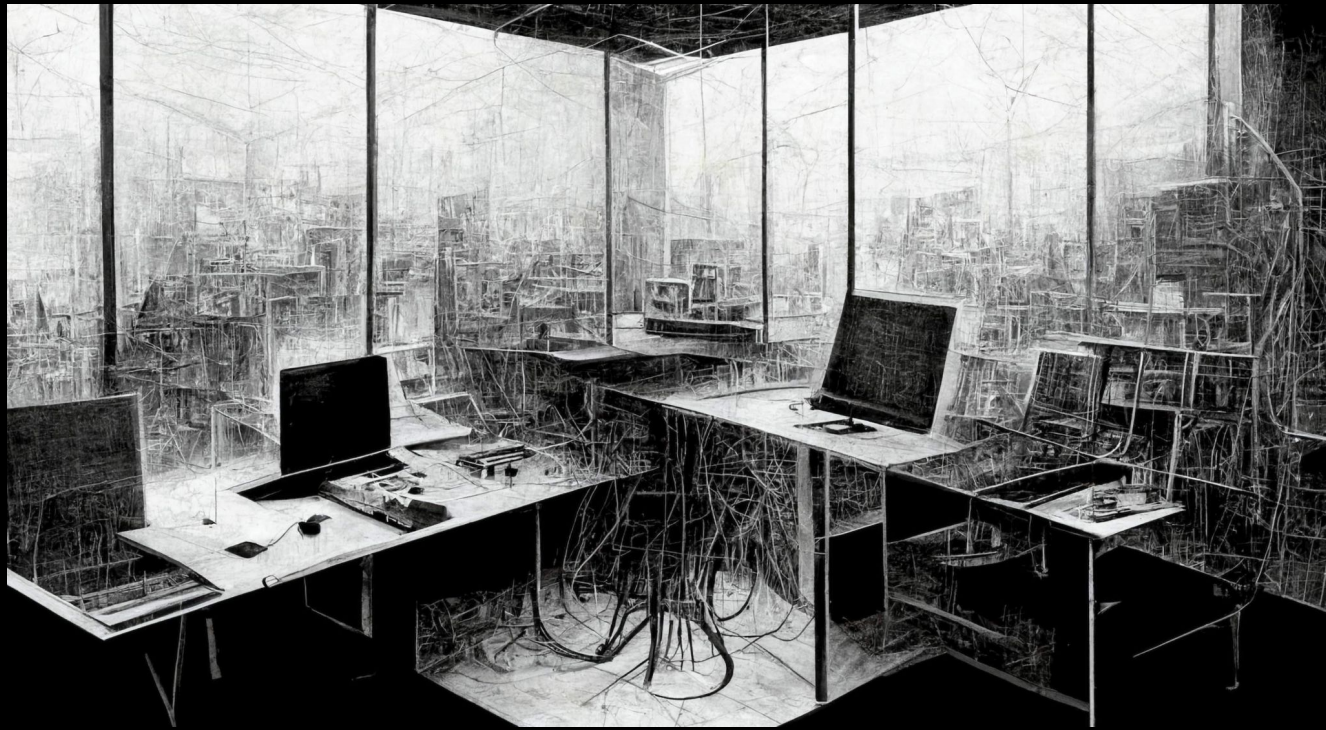
Painting a Wedding Portrait for Cai's Grandparents  
2024

Gunpowder on canvas

50.5 x 61 cm

Photo courtesy Cai Studio

Cai Guo-Qiang: A Material Odyssey  
USC PACIFIC ASIA MUSEUM



George Legrady

solo exhibition "AI & Fiber  
Synthesis"

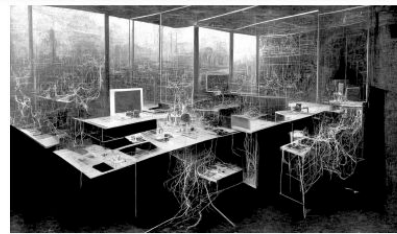
Woodbury University in Burbank,  
Nan Rae Gallery



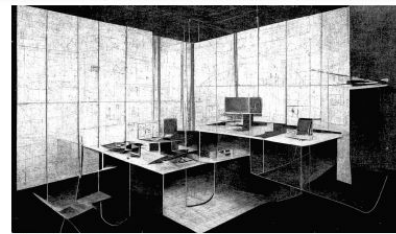
Alchemist's Study #803b



Alchemist's Study #56455



Alchemist's Study #11b0e



Alchemist's Study #60195

## The Alchemist's Study George Legrady

"AI, Image & Fiber Synthesis" is an exhibition consisting of eight large-scale tapestries (8' x 5') that features two series of images, one representational, "The Alchemist's Study", and the other abstract, "Abstraction Studies". Both series of images were produced during the fall of 2022, using the MidJourney version 3 generative AI image synthesis software. "The Alchemist's Study" initially triggered by the text prompt "imaginary workspaces electrostatic" resulted in images that evolved and diverged through multiple iterations to feature variations of an internal office / laboratory space that suggests surreal, science-fiction environments where material structures, electronic devices, electrostatic charges, and external scenery mutate in visual detail.

Inspired by Dulpio author Raymond Queneau's "Exercises of Style" in which an event is retold through diverse narrative ways, the series explores the representation of an architectural space through the lens of Artificial Intelligence image synthesis. The generated images are given physical, material form as woven tapestries inspired by the geometric patterned textile wall hangings of the artist Anni Albers. The primary objective of the series is to intricately merge the virtual and the tangible, blending Artificial Intelligence image generation, architectural design, and photographic visualization, expressed through the craft of tapestry fabrication.



Abstraction Studies #e77893



Abstraction Studies #a43c7



Abstraction Studies #e43caf



Abstraction Studies #15b75

## Abstraction Studies George Legrady

"The Abstraction Studies" initially appear non-representational and may remain so in the viewer's perceptions. However, upon closer inspection, their origins as photographic scenes may gradually become evident. Through the iterative activation of image-to-image where a pre-existing image is used to generate a new image, these compositions have emerged over time through a process of "progressive drift" from the photographic to abstract renderings. The resulting images, while abstract in nature, and seemingly removed from their source as photographic constructions, still

Digital images and tapestries are both mediums for visual representation, but they differ significantly in their creation, materiality, and presentation. Digital images exist in the digital realm and are intangible. Tapestries are physical objects with texture, depth, and weight. Digital images are created and displayed electronically through a 2D matrix of pixels that represent colors and shapes on a screen. In contrast, tapestries are textiles made of interwoven yarns, with the weaving process involving the intersections of vertical and horizontal threads to achieve specific color values at

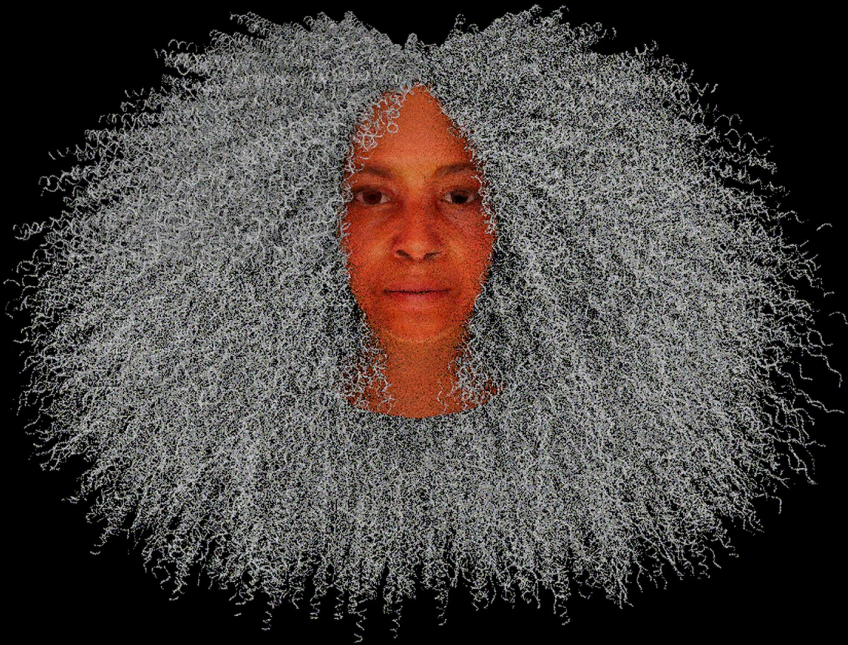
Digital images can be easily scaled up or down in size without quality loss, whereas the size of a tapestry is limited by the dimensions of the loom and the weaving process. The challenge in translating a digital image to a tapestry lies first in the selection of materials and colors to translate the tonal scale of the source image and second in the choice of the weaving algorithm that best enhances the project's aesthetic intentions.

## AI & Fiber Synthesis

<https://www.mat.ucsb.edu/~g.legrady/exh/2024/woodbury/brochure.pdf>



## 2. AI and Generative Storytelling



Stephanie Dinkins

Not the Only One, Avatar, V1 (2024),  
deep learning AI installation,  
Courtesy of the artist.

All Watched Over by Machines of  
Loving Grace  
REDCAT

Rendering: 3.125% Ms/Sec: 5.783 Time: 00:00:00/00:00:19 spp/maxspp: 4/128 GPU: Temp: 59 Tri: 0/4.372m VRam: 1.612Gb/1.379Gb/4Gb grey8/16: 0/0 rgb32/64: 9/0



Charmaine Poh

in the shadow of the cosmic (2023),  
still of video, 30:33 min,  
Motion graphics: Jawn Chan  
Audio generation: Jawn Chan, Ashley Hi  
Chatbot customization: Ashley Hi  
3D animation: Brandon Tay  
Movement artists: Sonia Kwek, Chloe  
Chotrani  
Music: "Mutualism" by Anise  
Courtesy of the artist.

All Watched Over by Machines of Loving  
Grace  
REDCAT

### 3. AI and Biologically Inspired Art



## INTERSPECIFICS

Codex Virtualis,  
Emergence, 2024  
Custom AI, biological  
samples, custom  
microscope, metallic  
structure  
Artwork courtesy of  
interepeeiHes.

All Watched Over by  
Machines of Loving  
Grace  
REDCAT

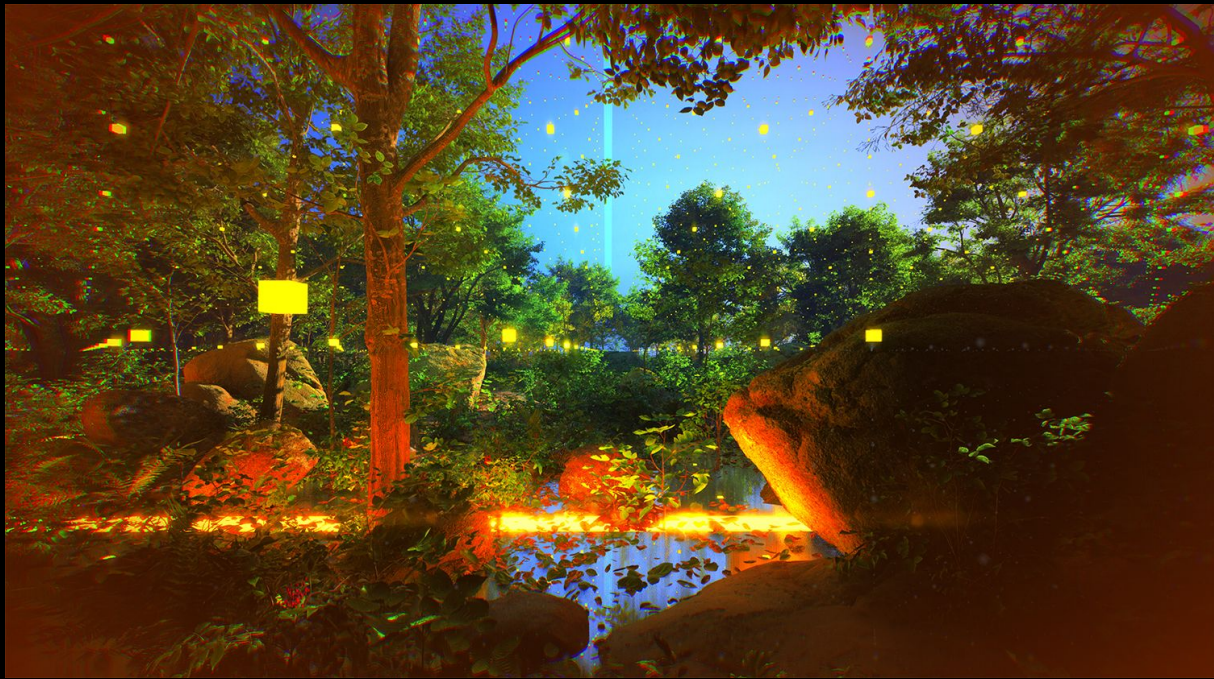


Laura Splan

Baroque Bodies (Sway), 2024  
Interactive audio-visual installation  
including data-driven sound and  
3D models with AI-generated  
imagery, 16 x 20 x 25 feet;  
Courtesy of the artist.

Future Tense: Art, Complexity, and  
Uncertainty  
BEALL CENTER FOR ART +  
TECHNOLOGY AT UC IRVINE

## 4. AI and Ecological Narratives



Damjan Jovanovic

Planet Garden

Views of Planet City  
SCI ARC





Tiffany Shlain and Ken Goldberg

If We Lose Ourselves  
installation view 2024, photo by  
Stefanie Atkinson Schwartz.  
Courtesy of Skirball Cultural  
Center, Los Angeles

Ancient Wisdom for a Future  
Ecology: Trees, Time, and  
Technology  
SKIRBALL CULTURAL CENTER



Tiffany Shlain and Ken Goldberg

“Tree #30” from Seeing the Forest:  
Gallery of Personal Tree Tributes,  
2024.

AI generated image of a  
Jacaranda mimosifolia tree, based  
on measurements and  
photographs taken by the author  
of a tree in his neighborhood and  
submitted to the website  
[ancientwisdom.art](http://ancientwisdom.art)

Ancient Wisdom for a Future  
Ecology: Trees, Time, and  
Technology  
SKIRBALL CULTURAL CENTER

## 5. AI for Surveillance and Social Commentary

sleeping bag (6.18%)

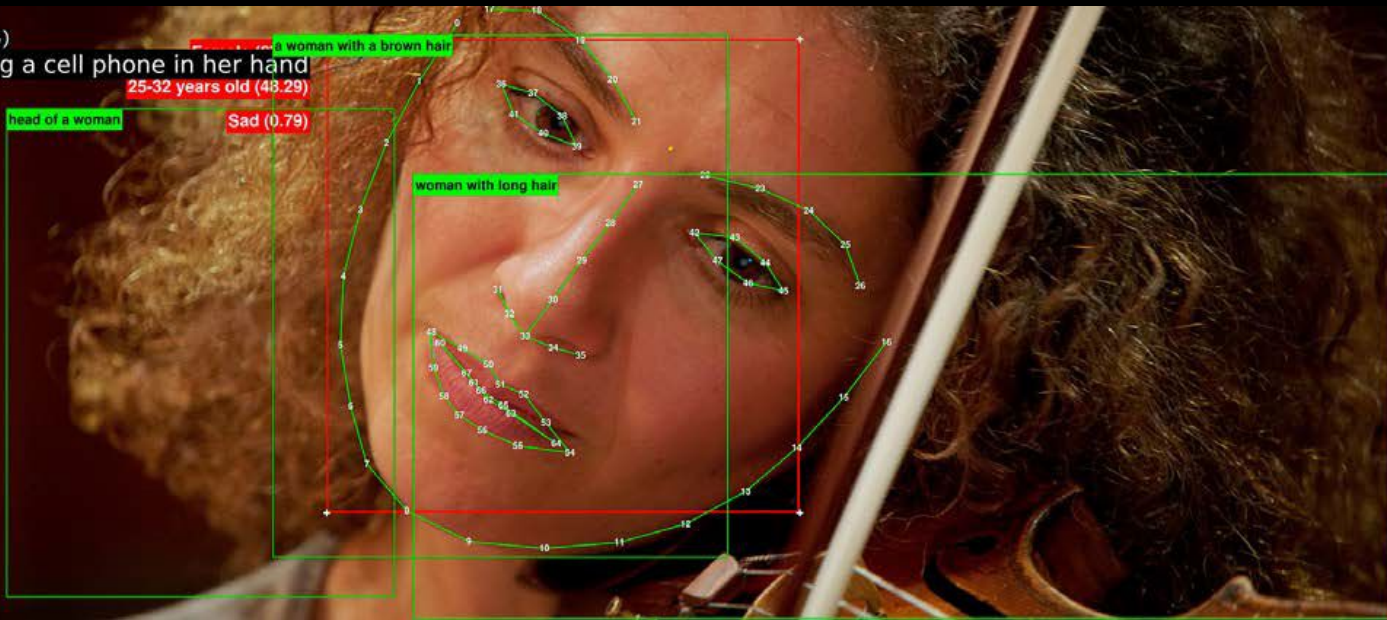
A woman holding a cell phone in her hand

25-32 years old (48.29)

head of a woman

Sad (0.79)

woman with long hair



Trevor Paglen

Image Operations, Op. 10, 2018

Digital video (23 min., 5.1 surround sound)

Courtesy of the artist; Altman Siegel, San Francisco; and Pace Gallery

Digital Capture: Southern California and the Pixel-Based Image World  
UCR ARTS AT UC RIVERSIDE



Sondra Perry(b.1986)

Double Quadruple Negative Etcetera

Etcetera I & II, 2013

Two-channel high-definition video (color, silent)runtime 9 minutes

Courtesy Sondra Perry, Bridget Donahue Gallery and Electronic Arts Intermix

Invisibility: Powers and Perils

OXY ARTS

# How many of the exhibitions have AI?

0-10% 20-30% 50-60% 90%-100%