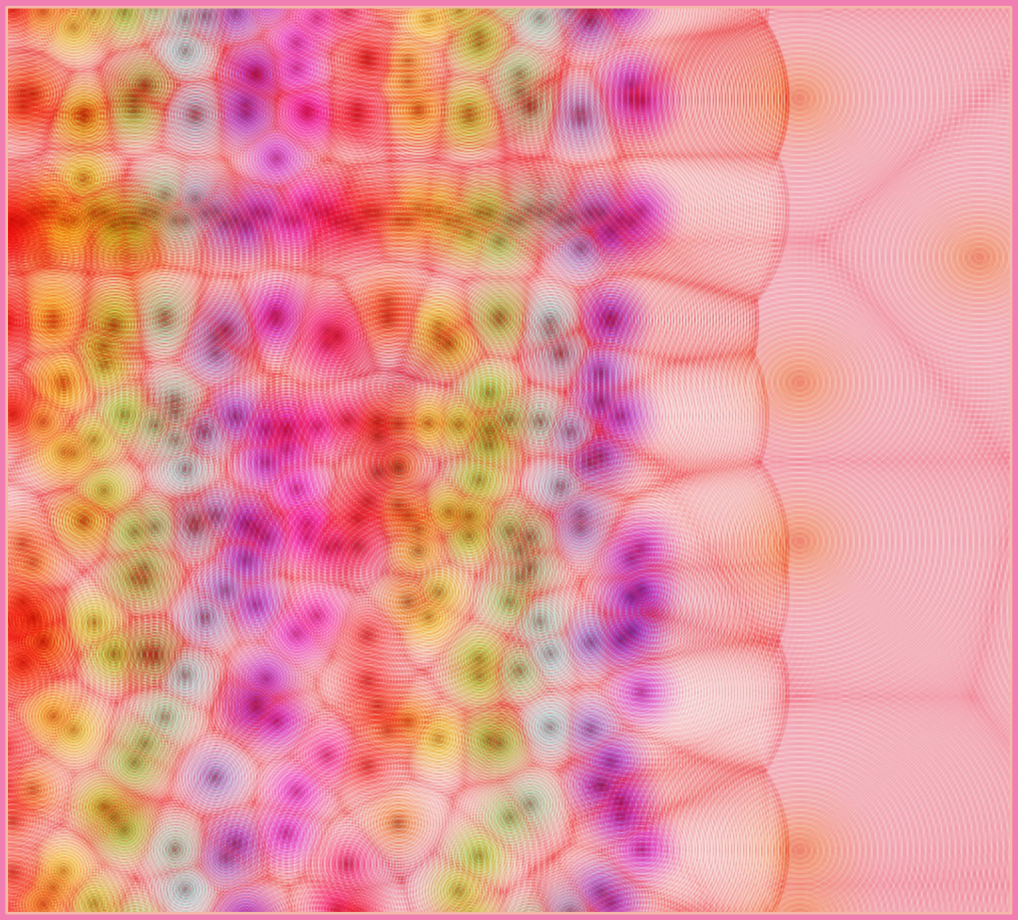
Computer Arts Society Members' Exhibition



July 2024
BCS Moorgate, London

Cover image: **Angela Ferraiolo** Cells, No. 1 (2024)

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July 2024
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www.computer-arts-society.com

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Contents

Introduction

Welcome to the 2024 **Computer Arts Society** Members' Exhibition. This year's show takes place at the **BCS – The Chartered Institute for IT** offices at Moorgate in London and runs throughout July, August and September 2024, with a preview taking place on the 26th of June.

The exhibition is the result of an open call to members that we made earlier in the year. Anyone who is a member of the CAS email list was invited to enter and we requested that people submit recent work to give the exhibition a strong contemporary feel. This resulted in over 60 entries – more than twice that of our inaugural BCS Moorgate exhibition in 2023.

The entries were judged by five members of the CAS organising committee and it soon became clear that the quality of the work was such that it was going to be difficult to identify just 20 artworks to feature in the exhibition (a limit imposed by the space available to us). This presented us with something of a dilemma. How do we fully recognise the work submitted?

We have therefore selected 29 works this year. 20 of these will occupy the 20 frames we have at BCS Moorgate and an **additional** 9 will be included as smaller prints. All 29 artworks feature in this catalogue and they will all be printed at full 19" by 13" size for inclusion in the **Computer Arts Archive** following the exhibition.

We feel that this is a fair compromise and hope that you agree. Make no mistake, every artist featured in this catalogue deserves full recognition for the quality of their artwork.

The members' exhibition is very important to the **Computer Arts Society**. Not only does it help to promote the work of our members, but it also captures the range of work currently described as "computer art". Unsurprisingly, art made with Artificial Intelligence (AI) features in the collection, but so does work created by artist-programmers and artists working with more traditional generative techniques.

The use of the latest technologies has always been important in computer art. Artists are often able to identify the non-obvious implications of innovations such as AI and can help us all build an understanding of what the technical future may hold. However, artists also understand that it is important to choose the *best* technology to use in a creative process, not always the *newest*. This I an important message for all of us, I think.

I hope you enjoy this year's exhibition and, if you are an artist, consider responding to the 2025 call for artworks.

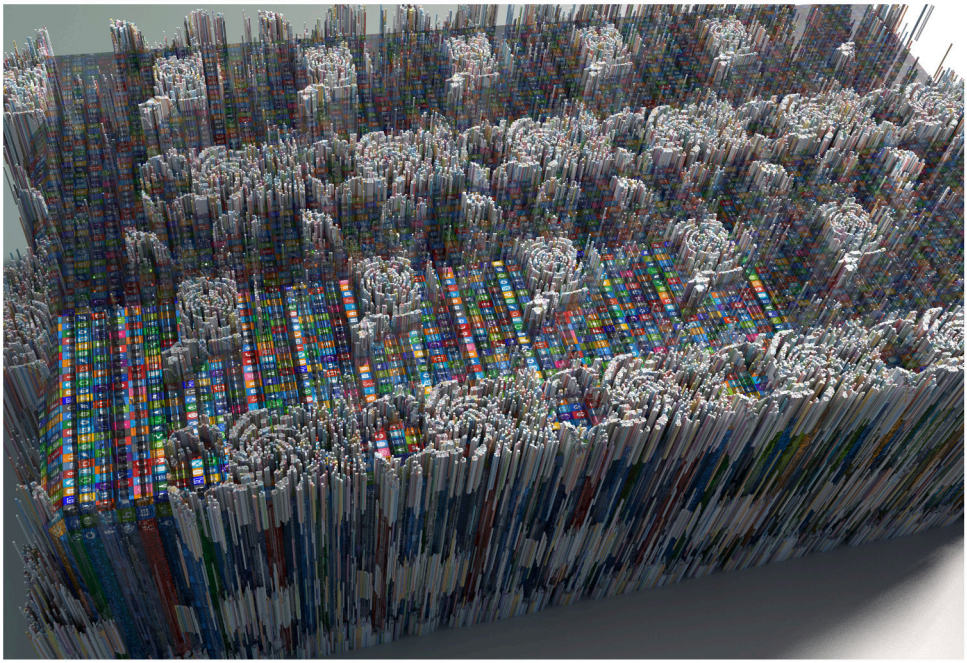
Sean Clark
Computer Arts Society Chair
www.computer-arts-society.com

Exhibition Artists

Sandra Crisp / Angela Ferraiolo / Sohyun Lee
Alp Tuğan / Jack Tait / Cynthia Beth Rubin
Brian Reffin Smith / Dave Everitt & Fania Raczinski
Dennis Summers / Paul Hertz / Bhavani Esapathi
Malte Kosian / Daniel Berio / Stephen Scrivener
Anna Ursyn / Graham Bate / Amalia Foka
James Alec Hardy / Charlotte Lengersdorf / Paul Butler

Sandra Crisp – *Datascape 214[2]* (2020 – 2024)

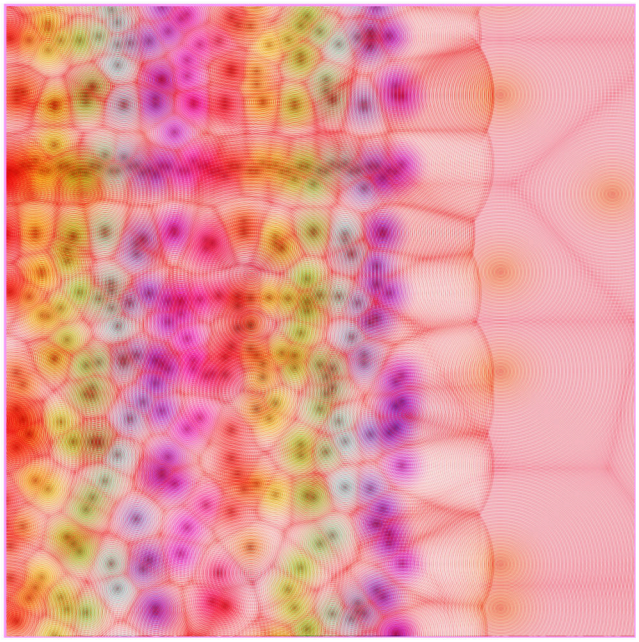
sandracrispart.com



Borrowed visuals, such as emojis and Fibonacci forms found in nature, were used as surface modifiers in Blender to create precarious datascapes. In this series, ambiguous 3D iterative surfaces and structures appear as if created by slightly corrupted algorithms. Overall practice uses open source or free software with work often emerging via a process of accident or error. Working in a state of unknowing and experimentation inherited from previous practice of alchemic properties of etching and lithography. Suggestions of dynamic change used to reflect today's saturation of images and information via 24/7 news cycles, and the updating web.

Angela Ferraiolo – *Cells, No. 1* (2024)

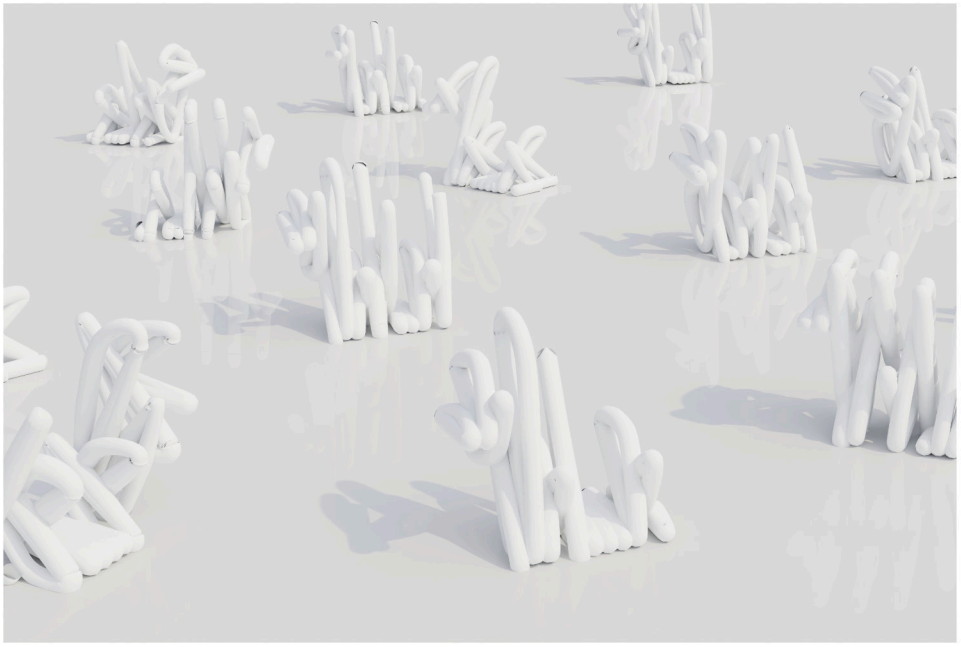
www.instagram.com/_angela_ferraiolo



Cells No. 1 is an experiment in the partitioning of plane into convex shapes similar to Voronoi polygons or Dirichlet regions.

Sohyun Lee – *The Case of Dataworm* (2023)

sohyunlee.tumblr.com/thecaseofdataworm



Can we inherit memories? *The Case of Dataworm* explores the possible genetic memory through human RNA data. The hypothesis that RNA transmits ancestral memories to the next generation is being studied by Prof. Rechavi. Based on this idea, Dataworm 3D models were converted from human RNA data with computer generative programming.

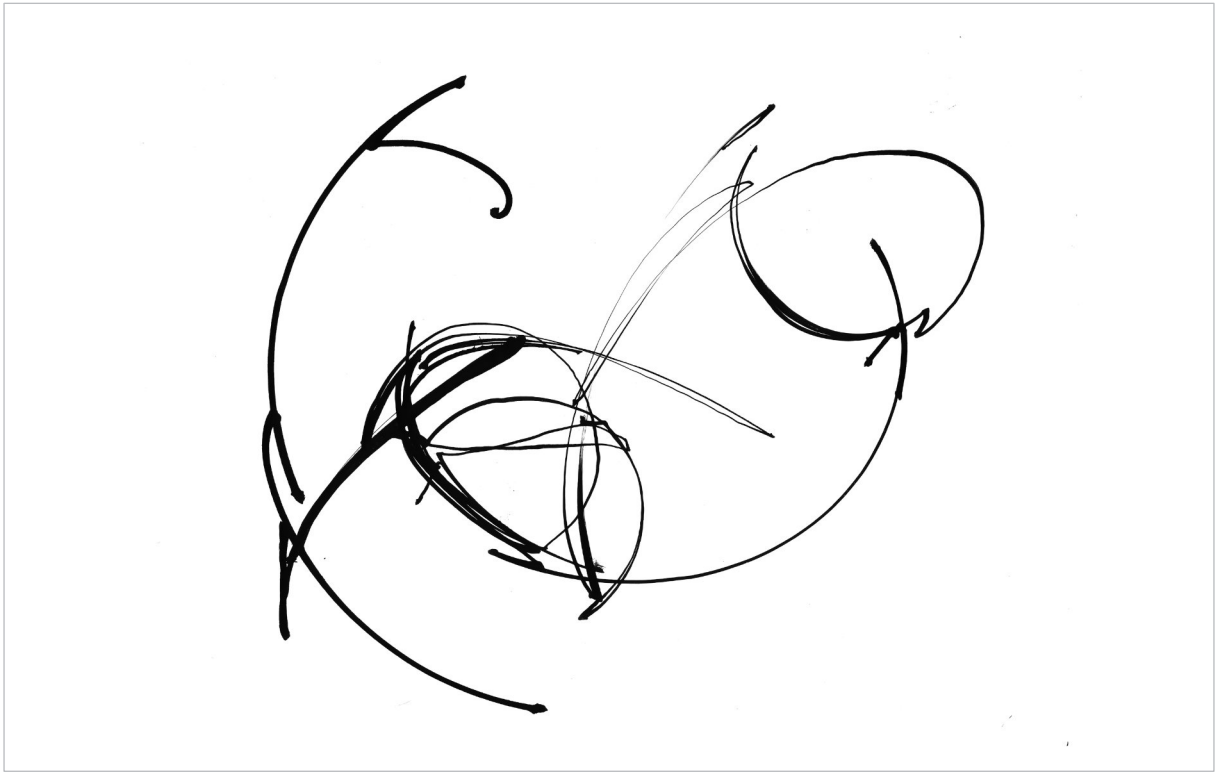
Alp Tuğan – *A(lie)ns* (2023)

www.instagram.com/alptugan

The artwork titled *A(lie)ns* uses circular shapes to illustrate the emergence of complex forms from simplicity. The creation process involves three primary procedural steps: first, generating object paths; second, adding shading; and finally, applying light rays to the generated paths.

Jack Tait – *XTP 019 Flo Pen Random Analogue Drawing* (2024)

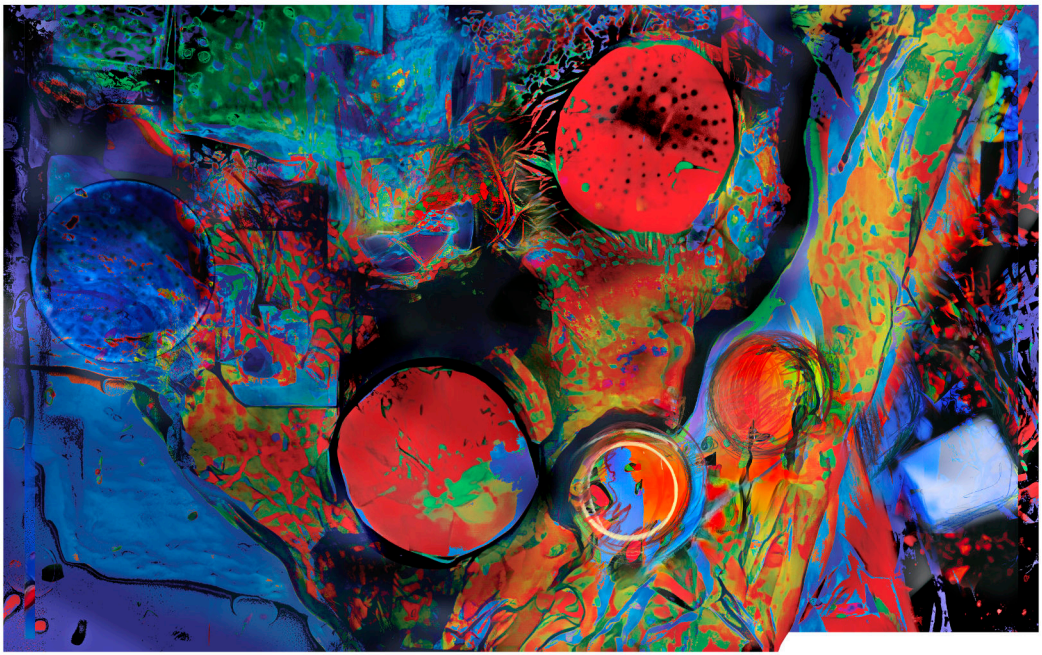
www.taitographs.co.uk



The XTP analogue drawing machine has an X axis, turntable and pen rotator. It is designed to explore near chaos and random output in graphic drawings through the interplay of three movements. The machine is programmed with a randomiser device with six possible outlets. In addition, the pen action has a variable pressure device used in conjunction with a Flo pen. Provision also exists for calligraphic pens. The variable line character enhances the random output.

Cynthia Beth Rubin – *Diatoms, Salt, and Picasso* (2023 – 2024)

CBRubin.net



The world of microscopic life is a secret place of awe and discovery. This image began with wandering through drops of ocean water with a powerful Electron Scanning Microscope. The resulting hyper-reality of photographs of plankton and salt crystals are mixed with the most unreal use of AI from a prompt for Picasso. The vestiges of Picasso are long buried in multiple iterations of evolving imagery, including the integration of analogue drawing and textures derived from seaweed and ocean debris. Thus this Techspressionist work is cubist influenced, biological, AI, and full of imagery of salt crystals and plankton.

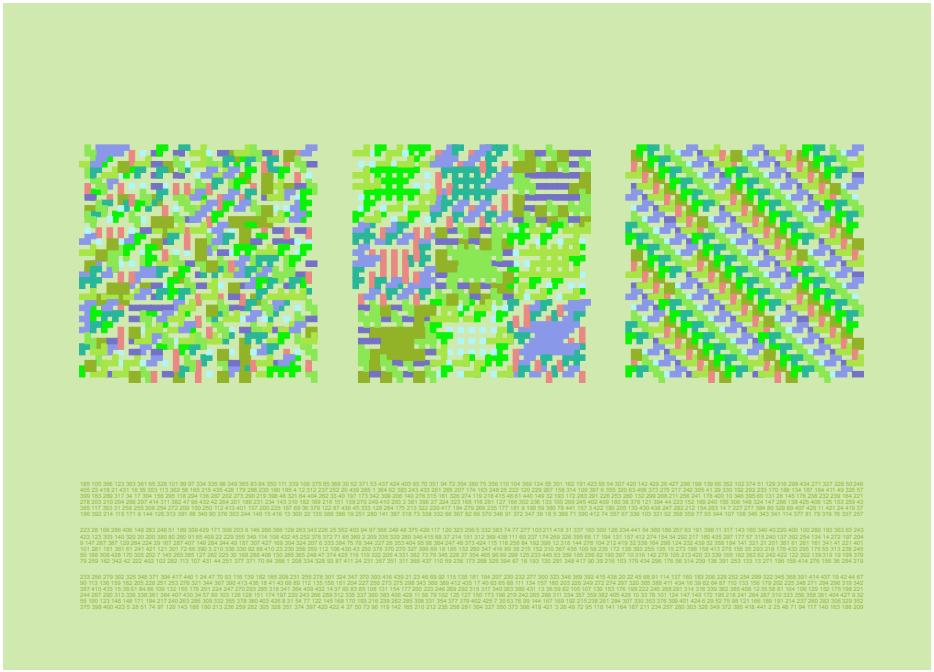
Brian Reffin Smith – *Pain* (2024)

brian-reffin-smith.com

A rough line drawing of torture transformed by triangle generation along edges, with automatically added suggestions of 'painting by numbers'. A mixture of hand and computer-generated transformations, of invitation to participation and a refusal to allow it.

Dave Everitt & Fania Raczinski – *Order 21 Tetromino Triptych* (2024)

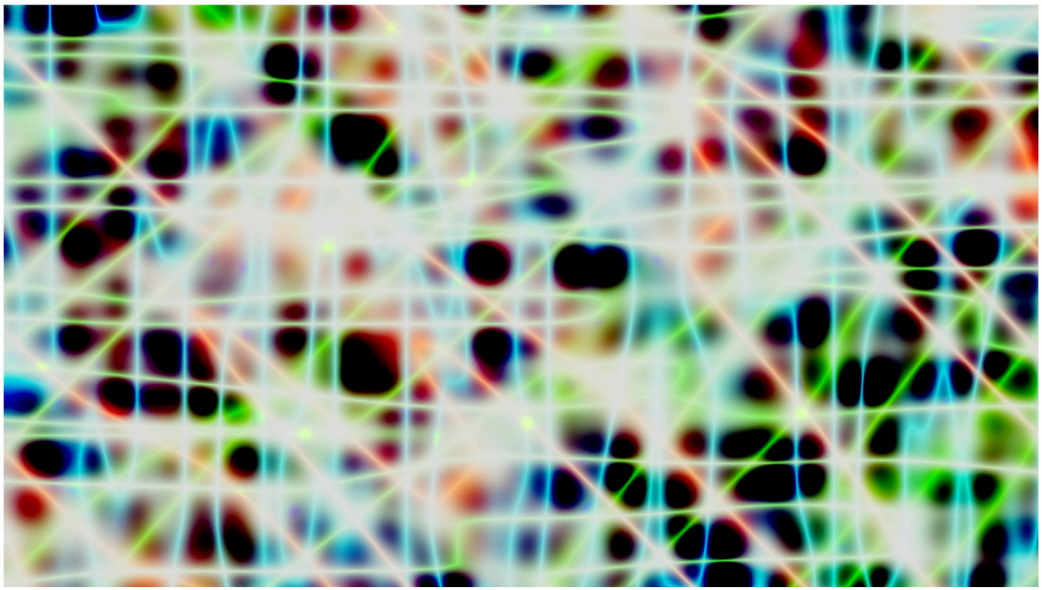
squares.cubelife.org/about



Part of a larger long-term project, *CubeLife* which investigates patterns from magic squares and cubes, this work visualises hidden forms and algorithms underlying three different order 21 magic squares, travelling through each by substituting tetrominos for the digital roots of the numbers in sequence. This generative artwork is a specifically-curated example taken from an almost endless possibility of visualisations produced by translating these pure mathematical entities into greatly varied sets of visual spaces. The web app itself is also used for research into the mathematical patterns behind the work, about which we have published two papers so far.

Dennis Summers – *Cosmic Strands (single frame from video)* (2023)

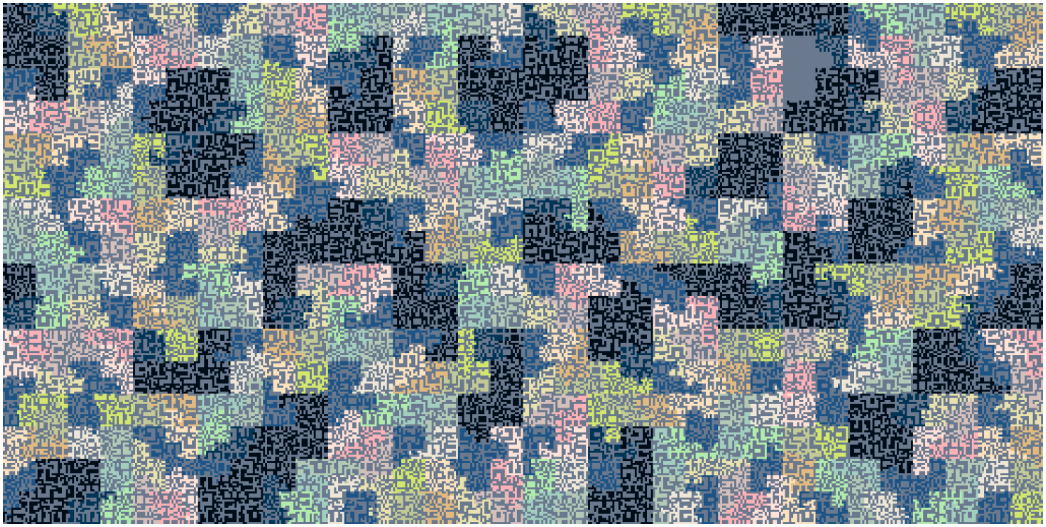
www.phase-shift.org



Cosmic Strands is a single frame taken from the 20-minute video of the same name (http://phase-shift.org/Fusion.htm). Like all of the videos from this series, and prior similar ones, patterns of colours are digitally generated and cycle through all the hues of the spectrum, and blend and oppose in unpredictable ways. The videos vary by the shapes, arrangements of shapes, colour patterns and level of complexity. Like many time-based experiences each one of these pieces tells a different "story." One can achieve a wide range of visual and temporal possibilities within this seemingly restricted process.

Paul Hertz – *El Guateque del Diablo de las Flores (The Flower Devil's Romp)* (2024)

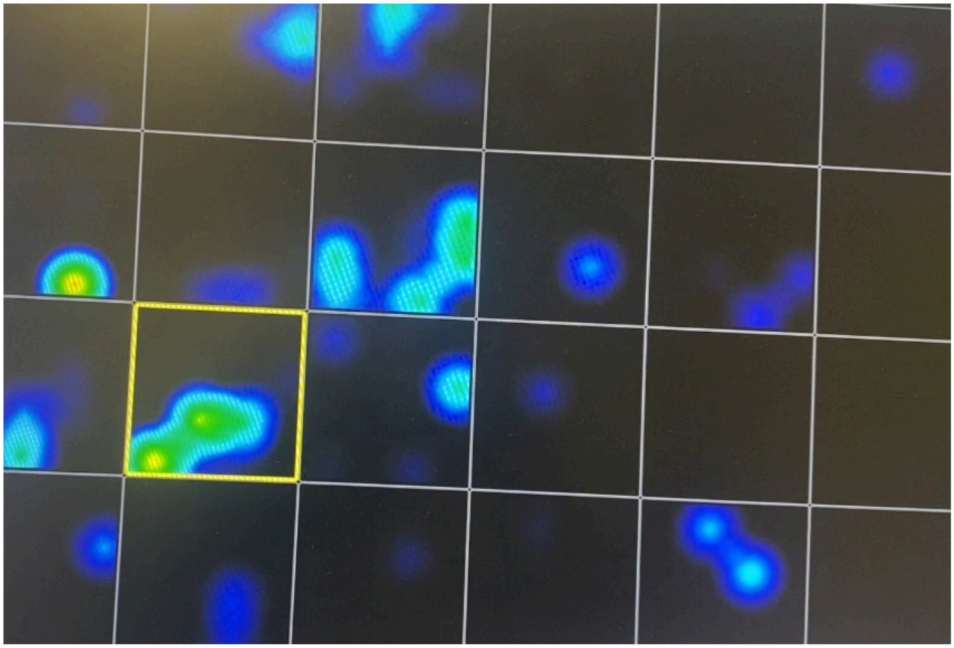
paulhertz.net



A celebration of colour and pattern, with an intricate underlying logic that might almost be random Guateque was created by wrapping rhythmic trains of pixels around a space-filling curve. An L-system produced all the initial patterns at varying scales and depths of recursion. I stacked the output images in transparent layers to create the final image. I used my own software written in Processing for all steps except the final compositing. I have used the same sorts of patterns for music, intermedia, and animation works.

Bhavani Esapathi – *IoC: NeuroArt* (2024)

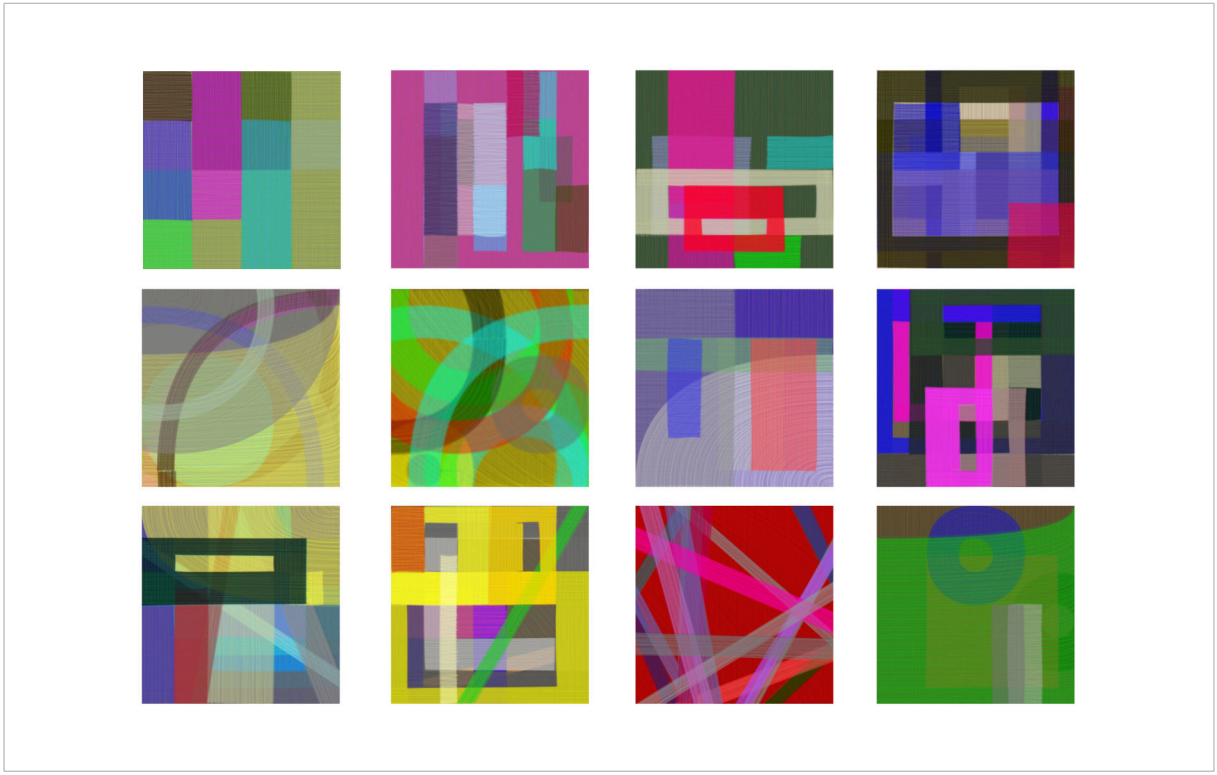
www.bhavaniesapathi.com



IoC: NeuroArt is a landscape image of a Science Gallery London exhibition in collaboration with Kings' College London Wohl Imagining Centre. You are seeing a static image of how artificially created neurons out of skin cells respond to music. The response is visually captured and showcased within this landscape image. This is part of a greater body of work titled *Incite to Care*.

Malte Kosian – *Studies For a 6x6 Texture Generator Library* (2023 –2024)

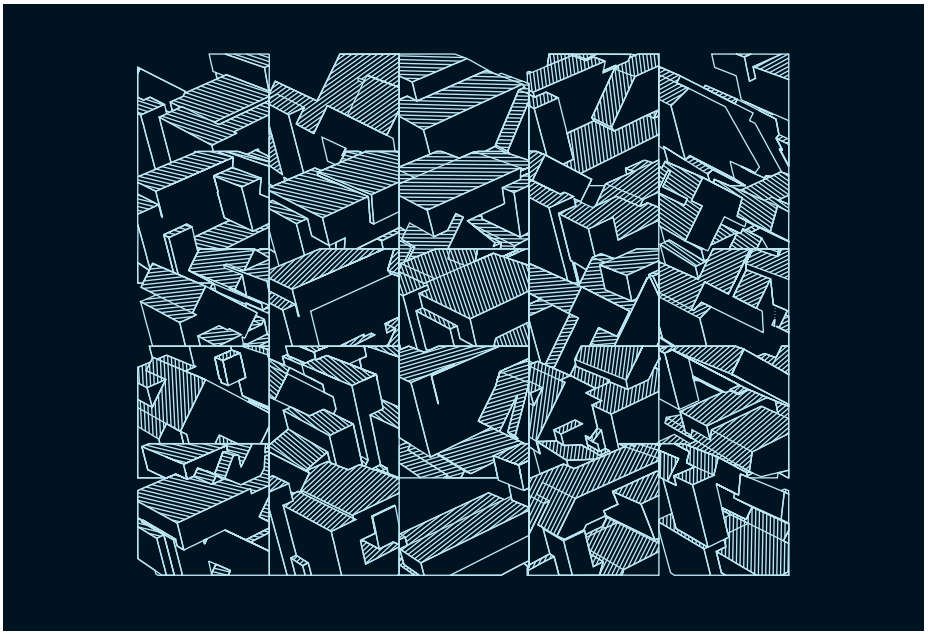
lieschen.art



This is a study of how to build and structure a library of texture generators; organising the entities, effects, compositional rules, their recombination with other entities, effects, rules. I use libraries like these to enrich the answers of my social network bots in my "rewrite" project of the X-tinct Twitter environment, which is called commentary.

Daniel Berio – *Building Blocks* (2022)

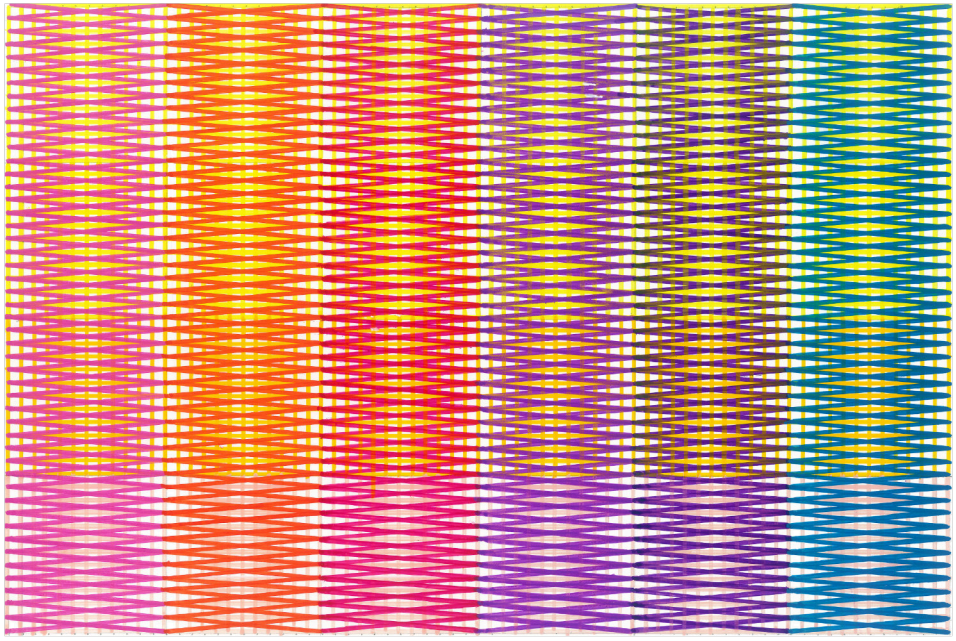
www.enist.org



This print is part of a series of experiments in which I generate highly abstracted letterforms starting from a font. The program first identifies the "strokes" that form the glyphs of the font. Each stroke is then simplified and stylized by quantizing its orientations, and finally, it is rendered in 3D using a polygon-based renderer. Each glyph is viewed up close, highlighting only some details and creating an abstract composition on a grid.

Stephen Scrivener – *YlYYdP under MRCPPdB* (2024)

www.stephenscrivener.com



The piece is part of a body of work initiated from a set of simple decisions. In this piece, the first to use a rectangular grid, the rows are first filled with a horizontal/vertical 5 mm grid, from top to bottom row with light yellow, yellow, dark yellow and pink. The columns are then cross hatched from left to right with magenta, red, crimson, purple, dark purple and blue. My method is generative and my practice experimental, in this case exploring the optical effects of colour, line combinations and sequences.

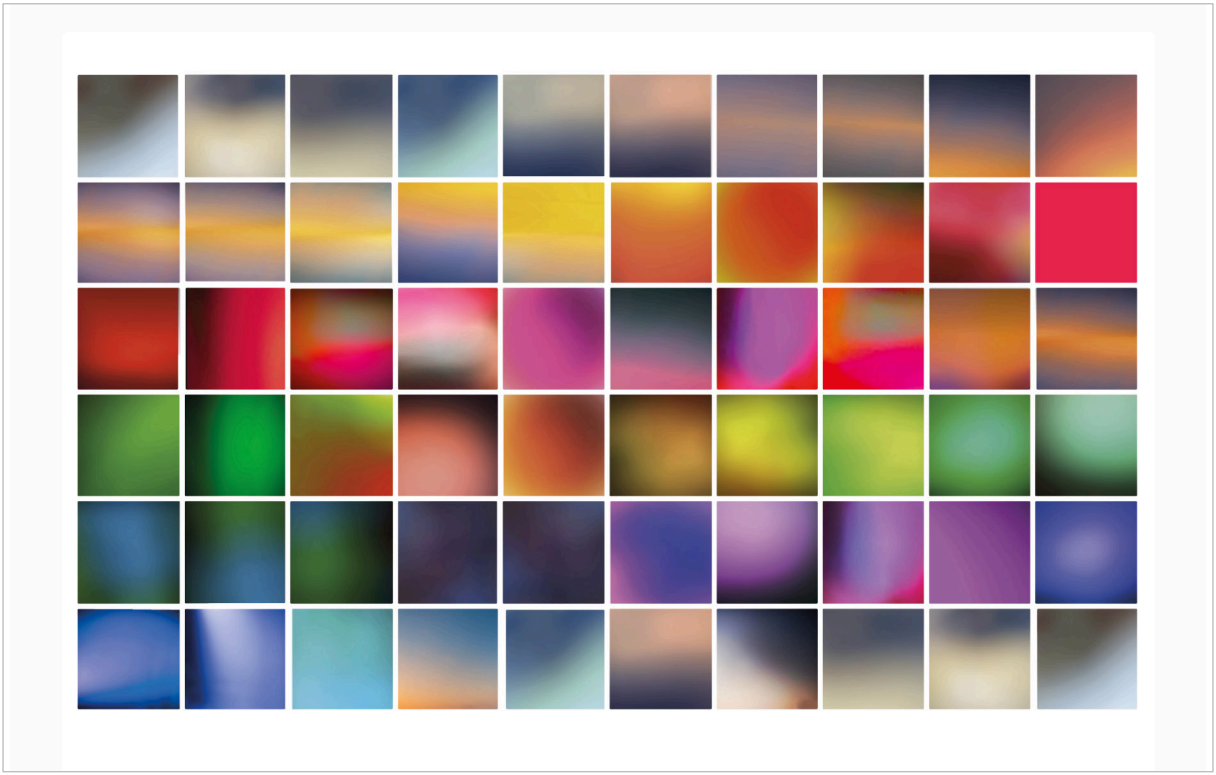
Anna Ursyn – *City Scale* (2024)

ursyn.com

The complexity of a city is shown through co-existence with multiple perspectives. We focus on what seems important at a given moment, what is emphasised by light, sound, or other sensory impulses. We get lost in various signals in a complex and co-dependent structure. Sketches are combined with coded images and AI.

Graham Bate – *Storyboard Mosaic Moving Painting Five* (2024)

www.youtube.com/@GrahamBate



Storyboard Mosaic is a print consisting of a progression of sixty still images extracted from several hundred created for the making of the *Moving Painting Five*. The print shows the preliminary flow of the movie in a static sequence. The *Moving Painting* series are time-based works that create a quiet space for tranquil, contemplative encounters with the self. They use digital technology to make a 4K continuous slow, almost imperceptibly changing, visual panorama. The “moving painting” is meant to be experienced rather than watched. Each movie lasts for several hours. There is no sound.

Amalia Foka – *Bushwalking Still #1* (2023)

amaliafoka.com/bushwalking.html

This scene, captured from the *Bushwalking* video, showcases a continuous landscape inspired by the Gardens of Stone National Park. Greenery fills the left side, gradually giving way to awe-inspiring, AI-generated rock formations on the right. These formations, envisioned by StyleGAN2 and trained on photos taken by explorer Yuri Bolotin during his bushwalks, rise like ancient pagodas, their shapes reminiscent of the Gardens' natural wonders. The artwork captures Bolotin's expertise and the unique geological wonders of the region. Though not a real place, it captures the essence of the *Gardens of Stone* - a vast, ever-changing landscape, impossible to explore entirely.

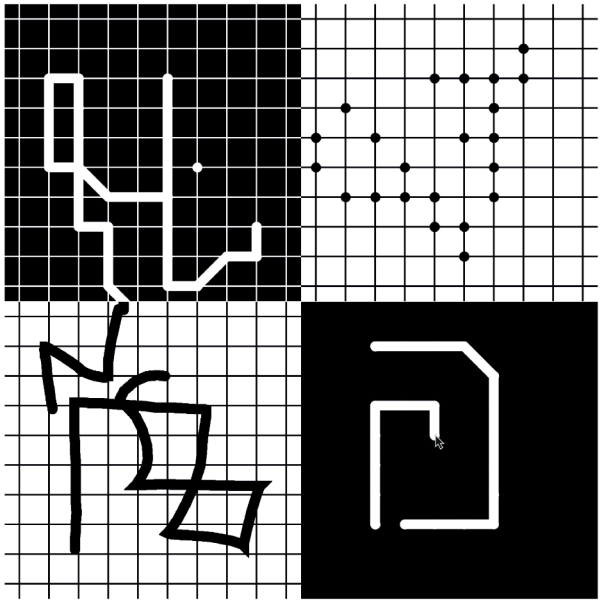
James Alec Hardy – *Janus Uroboros (2D Version)* (2024)

linktr.ee/jamesalechardy

The artwork originates from physical elements found within the artist's studio, scanned with LiDAR and manipulated with a sculpting application. *Janus Uroboros (2D Version)* shows an iteration capturing two faces from the 3D digital model, which is also distributed as a digital asset on the Tezos Blockchain. The online sculpture version contains a hidden QR code which can transport the user into a 3D game world, into which another iteration of the artwork is presented. In the way Janus may symbolise portals and transitions, the multiple formats of the work also attempt to connect physical and virtual, analogue and digital.

Charlotte Lengersdorf – *Uncausal Screenshot* (2023)

charlottelengersdorf.com



Uncausal Screenshot is a remnant of an interaction with around 200 different, graphically abstract interactive computer programs, which are linked across multiple websites in a 2x2 grid. The programs, navigated by computer mouse, explore a gap between human action and computer reaction as a space of potential for pushing action and thought beyond habitual and culturally and politically imposed patterns of causality and experience. They create spaces of encounter between different interactive contexts, continually disrupting the body's ability to act intentionally. The resulting lines and forms are not representational, but traces of the process of interacting with the programs.

Paul Butler – *Transposition: Hear Me Then, See Me Now* (2024)

nycemf.org/previous-festivals/2014-2/

Music is defined by our contiguous and sequential experience of time, yet a musical score is a visual representation where we can experience all time simultaneously. This piece explores an AI interpretation between what we think of as senses and dimensions. This artwork has been produced by generative AI based on an a piece of acousmatic music *Acousmatism 4* composed for and performed at the 2014 New York City Electroacoustic Music Festival.

Additional Artists

Shengyu Meng / David Upton / Nikita Kolbovskiy
Liam Jefferies / Luciana Haill / Helena Wee
Shanique Thompson / Mez Breeze / Megan Smith

Shengyu Meng – *The Garden of Robotic Delights* (2022)

foundation.app/mint/eth/0x224Fbe54F6D635E8694299677678aD82D596115a/1

The Garden of Earthly Delights created by Heronimus Bosch shows humans were indulging in fascinating and dangerous pleasures in the gap between heaven and hell. What I wonder is, what it would be like if there was a garden belonged to robots, or if humans use robots as avatars to enjoy their life in the metaverse? This question probably should be answered by machines themself. Therefore, I collaborated with artificial intelligence to convert the original work to the robotic version, and overlapped manual editing with my own understanding, to finish the final recreation, which should show the absurd joy that belongs to robots and the chaotic beauty from technology.

David Upton – *What if London Transport's Control Network Was Made of Gold?* (2024)

www.codedwalls.com

This artwork uses computer vision algorithms to transmute one substance into another, showing the beach beneath the street and the magic that makes the world.

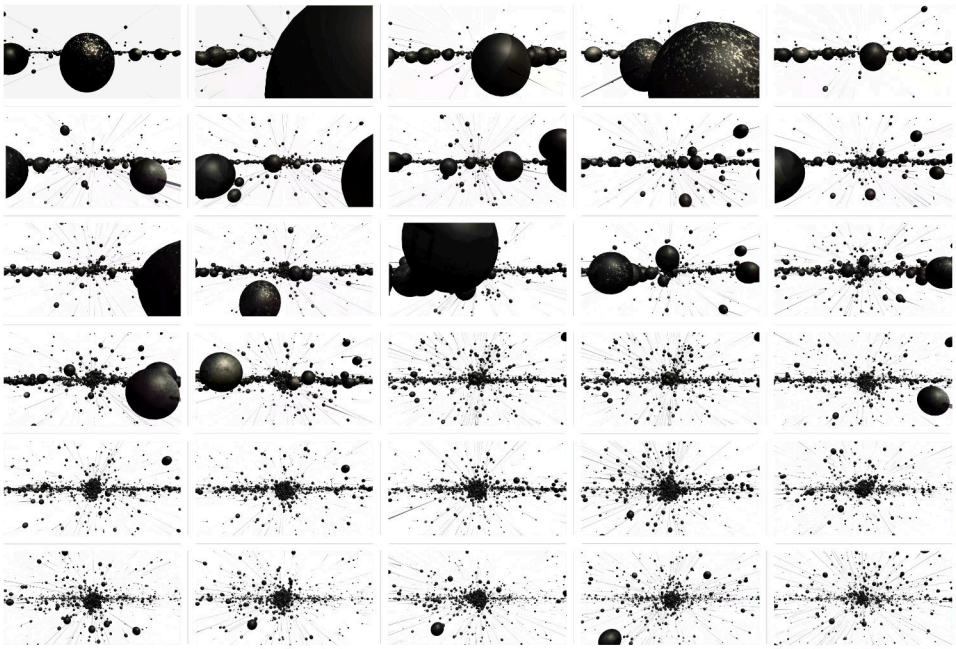
Nikita Kolbovskiy – *Transformations* (2021)

www.behance.net/gallery/68274127/FRABSTRACTIONS-NFT-collection

This picture is a part of my series *Frabstractions – Fractal Abstractions*. The series consists of 11 visualizations of mathematical formulas describing fractal structures. The aim of the project is to reveal what this or that formula expresses, to see the code of nature. Sometimes, the result looks like bird feathers, sometimes like tree bark. Each work is a visual decoding of a unique "genome".

Liam Jefferies – *Moments of Chaos* (2022)

www.liamjefferies.co.uk/blog/blog-post-title-two-et3w9



Moments of Chaos is a static time-based record of a generative orbital system, in which bodies are subjected to Newtonian gravity in the Unity Game Engine. Each iteration is at once unique and fleeting, with the artwork capturing this uniqueness in a sequence of snapshots from this emerging system.

Luciana Haill – *Inside 'No Hammer Needed'* (2023)

sites.google.com/view/nohammerneeded

Inside 'No Hammer Needed' – an intimate brainwave monitoring installation – where flickering white strobe lights induce altered states of consciousness. The seated participant, eyes closed and wearing a black EEG sensor band, transmits their brainwave signals to the artist, acting as a nightclub VJ. Real-time neurofeedback visuals blend into vintage postcards, Victorian portraits, and nostalgic local landmarks. The participant experiences an immersive ever-changing display that intertwines memories and minds. The title suggests that light can affect consciousness more subtly and effectively than trepanning, a procedure where a hole is drilled or scraped into the human skull.

Helena Wee – *Winter Summer Water Fire* (2024)

www.helenawee.com

This work uses a combination of programming-based machine learning and digital collage. Shan shui (mountain water) paintings were painted from multiple perspectives, that of a mountain, a river, a tree or a rock. Dissolving the subject they emphasise our insignificance within the cosmos showing not what was observed but instead form in relation to spirit. Water (winter) yields, bends, nourishes and cleanses. It can be cold and still, or fast-moving and flowing. Fire (summer) is a source of energy, intelligence and ideas. Landscape paintings are fields of meaning, technologies of the heart. They reveal local knowledge and heartfelt ecologies.

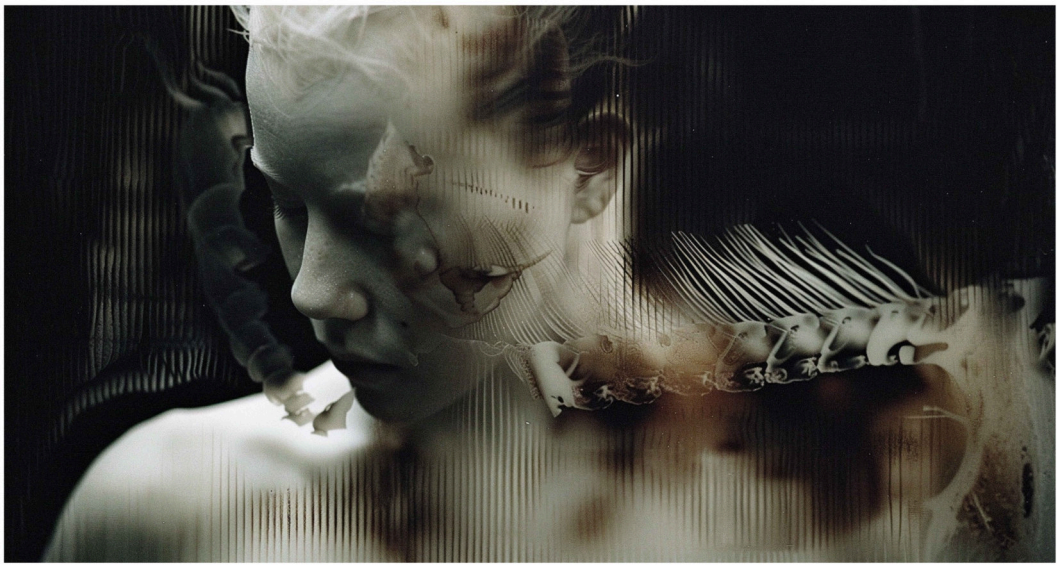
Shanique Thompson – *Chatoyant Sky* (2024)

www.artstation.com/artwork/n0grxX

Chatoyant Sky an enchanting digital art piece capturing the surreal elegance of iridescent ethereal dreamlike fashion. The artwork features flowing, luminous garments and sky fabric jelly fish, velvet fabric and shifting hues, reminiscent of a morning sunrise. Delicate, otherworldly figures floating gracefully amongst the clouds. This mesmerizing fusion of digital fashion and surrealism evokes a sense of otherworldly beauty and fantastical imagination.

Mez Breeze – *Break[Age]* (2024)

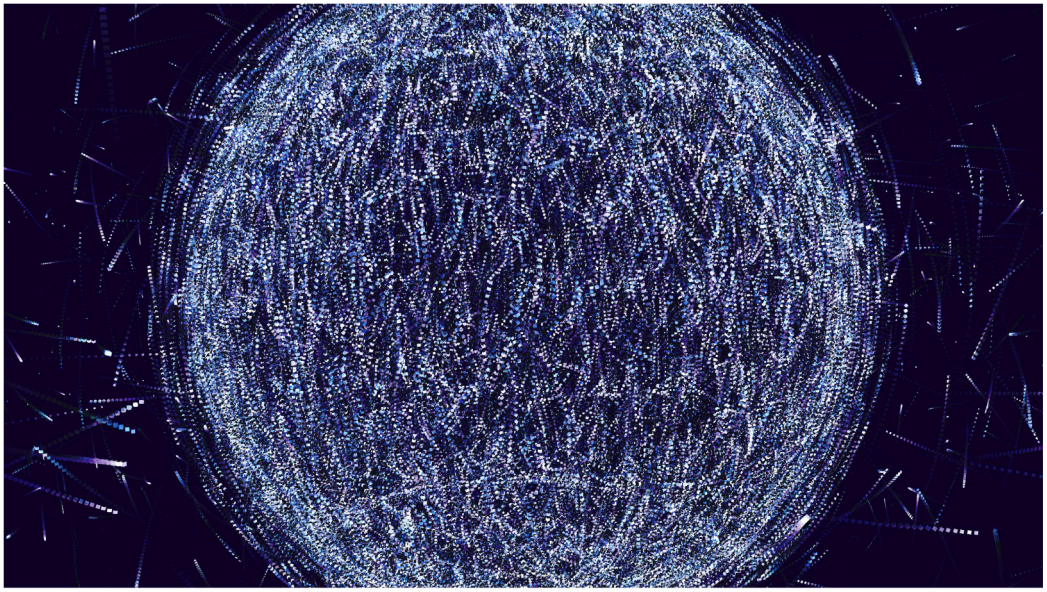
mezbreezedesign.com



Break[Age] explores digital portraiture using AI and advanced photo editing techniques. This work began with multiple generations crafted through Midjourney's AI, leveraging its inbuilt editing functions to refine the image. Each stage enhanced textures and layers symbolizing the complexities of adolescence. The final composition was subtly enhanced using photo editing software. This piece captures the turbulent transition from adolescence to adulthood, reflecting the pressures of toxic masculinity influenced by figures like Andrew Tate and Joe Rogan, and examining the resilience required to navigate such pervasive misinformation and damaging ideologies.

Megan Smith & Gao Yujie – *All the Stars We Cannot See* (2024)

allthestarswecannotsee.space



All the Stars We Cannot See is an immersive and interactive installation that situates participants within a virtual sky activated by 25,500+ satellites orbiting Earth. The artists are working to render visible the global impact of satellite density. This artwork builds a space for discussion on the impact of Space colonisation and brings awareness to growing mechanisms of surveillance and the political and economic driving forces for occupying Space. It won an Honorary Mention at Ars Electronica in 2022, and was exhibited at Kelowna Art Gallery (October 2023 - March 2024), and York University (Fall 2024).

Credits

This exhibition was made possible through the work of the **Computer Arts Society** committee, its members and associated artists. In particular we would like to thank the judges Sean Clark, Paul Brown, Catherine Mason, Nick Lambert and Geoff Davis, The exhibition was supported by the **BCS Chartered Institute for IT** and the **Computer Arts Archive CIC** in Leicester.

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