



Ryuta Aoki, Artist and Artistic Director

Portfolio (Updated: March 27th, 2026)

(Note: This document only features major art works and activities for which I am the primary organizer or equivalent. General client work, are not included.)



Ryuta Aoki

Ryuta Aoki is a Tokyo-based artist and artistic director working in-between art and technoscience. His practice centres on large-scale installation, crossing into curation and community building.

In 2000, Aoki co-founded a tech startup. Over the following decade he worked as an engineer and then as a director at tech startups specialising in embedded OS, middleware, and high-performance computing. In 2011 he launched TEDxKids, the first TEDx programme for children in Japan, running it with more than 100 volunteers. In 2014 he initiated Art Hack Day, Japan's first art hackathon, giving rise to more than 70 artist collectives — many of which went on to be invited to art festivals in Japan and abroad, with some receiving the Excellence Prize at the Japan Media Arts Festival. In 2016 he co-founded The TEA-ROOM, an artist collective reinterpreting the philosophy of chanoyu for the present day, and ALIFE Lab., a community of artificial life researchers. In 2018 he co-founded ALTERNATIVE MACHINE, a deep-tech startup applying artificial life research to society, and launched METACITY, a research collective exploring possible urban futures. That same year he served as Director of ALIFE 2018, the first international conference on artificial life following the merger of European and American academic societies. In 2019 he co-founded Mucha-Kucha Inc. with members of The TEA-ROOM, an artist management company for practitioners working with chanoyu.

Major works include the Alternative Computations series (2026–, Quantum Art Festival Special Exhibition, Spiral Garden, Tokyo), which sculpts the cosmologies of vernacular computing cultures using quantum computers; Simulated Consensus (2024, National Asia Culture Center, South Korea), in which AI agents simulate approximately 100,000 virtual voters to interrogate the assumptions underlying democracy; the SOTOROJI series (2020–), which summons the spiritual threshold of the tea garden through tens of thousands to over 130,000 QR codes; Artificial Moons (2020), projecting artificial moonlight trembling to the rhythms of the three-body problem onto a 150-metre building, inaugurating the rituals of a fictional city within the play of chance; the Bio Sculpture series (2021–), using a massive soil 3D printer extendable to 30 metres to bring three-dimensional wetland environments into being within the city; and the ANH series (2019–), acoustic ecosystems of digital agents evolving through genetic algorithms.

As a curator, Aoki served as Creative Producer for Japan Media Arts Distributed Museum (Agency for Cultural Affairs, 2020) and as Artistic Director of the exhibition Jack into the Noösphere at Chiba City's inaugural art festival (2021). In 2022 he contributed to the conceptual design of the international art festival succeeding the Japan Media Arts Festival.

Awards and fellowships include the Social Impact Award (Minister of Education Prize) at the 25th Japan Media Arts Festival, Art Division (2022) — the first awarded to a Japanese group; ACC CREATORS Residency (National Asia Culture Center, South Korea, 2024); Devcon 7 Scholars Program (Ethereum Foundation, 2024); and WAN: Art & Tech Creators Global Network (Japan Arts Council, 2025).

[Website](#) [Instagram](#)

Artist Statement

Invisible structures condition society. Kuuki — the pressure of collective mood that compels conformity without reason — moves people, preconceptions close the world, boundaries partition perception, and every one of them can be rewritten. I know this. I create scenes and programmes that intervene in these structures and bring alternative ways of being into lived experience. That is my practice.

Two stances sustain this work. One is mitate — seeing one thing as another — deeply rooted in Japanese culture. I extend this into the ecology of contemporary technology, placing marginalised orders in unfamiliar contexts to dissolve the boundaries between nature and artifice, reality and fiction, past and present, allowing what has been suppressed to surface. The other — as life itself does — is to set systems in motion and attend to what emerges, rather than designing outcomes. My material is exactly this — systems whose behaviour exceeds human intention.

A work does not conclude at its exhibition. It continues to change through interaction with its environment and participants, each time evoking visions of pasts that could have been and futures that still could be. What I seek is an irreversible shift in perception: the recognition that the world could have been, and still can be, organised otherwise. I resist the convergence of ways of seeing into a single view. I make visible what has been rendered invisible, so that the diversity of ways of knowing does not quietly disappear.

Solo Exhibitions

- 2026 Alternative Computations — Worlds Otherwise Calculated, Quantum Art Festival Special Exhibition
- 2020 Exhibition: Multi-Layered City Makuhari, Chiba City

Group Exhibitions

- 2026 Emergence(y), Science Gallery Melbourne, Australia (forthcoming)
- 2024 AI · Human · Multiverse, National Asia Culture Center, South Korea
 - Trusting the Unseen, Ethereum Foundation, Thailand
 - Reframing Exhibition, DESIGNART 2024
- 2022 25th Japan Media Arts Festival Exhibition of Award-winning Works, Agency for Cultural Affairs
- 2021 2121 Futures In-Sight, 21_21 DESIGN SIGHT
 - Ars Electronica 2021 Garden Tokyo, Online
 - Chiba City Festival of Arts
 - ART for SDGs: Kitakyushu Art Festival Imagining Our Future, Kitakyushu City
- 2020 Next World ExhiVision x 23rd Japan Media Arts Festival, Agency for Cultural Affairs
 - Japan Media Arts Distributed Museum, Agency for Cultural Affairs
- 2019 MUTEK.jp 2019

Commissions & Collections

- 2025 SOTOROJI #4, DENSO Advanced Research and Innovation Center, Japan
- 2021 Bio Sculpture, Kitakyushu City, KIGS, Japan

Awards / Fellowships / Residencies

A = Awards / F = Fellowship / S = Scholarship / R = Residency / H = Honorary Mention

- 2025 F WAN: Art & Tech Creators Global Network (Agency for Cultural Affairs, New York, USA)
- 2024 S Devcon 7 Scholars Program Artists and Writers Cohort (Ethereum Foundation, Bangkok, Thailand)
- R ACC CREATORS Residency 2024 (Asia Culture Center, Gwangju, South Korea)
- F Curatorial Research Program (Lithuanian Culture Institute, Vilnius/Kaunas, Lithuania)
- 2023 F MOTION GALLERY
- 2022 A 25th Japan Media Arts Festival, Art Division, Social Impact Prize — Bio Sculpture
- 2021 A WIRED Creative Hack Award 2021, Public Prize — Bio Sculpture
- H WIRED Creative Hack Award 2021, Finalist — Artificial Moons
- 2017 F Salzburg Global Seminar
- 2015 H Great TEDx Stage Design — TEDxKids@Chiyoda
- 2012 H Best Practice of TEDx — TEDxKids@Chiyoda
- H Best Stage Design of TEDx — TEDxKids@Chiyoda

Current Positions

- VOLOCITEE Inc., Founder & CEO
- METACITY, Co-Founder & Artistic Director
- Mucha-Kucha Inc., Co-Founder & Executive Director
- ArtHackDay.jp, Founder & Artistic Director
- The TEA-ROOM, Co-Founder & Artistic Director
- ALTERNATIVE MACHINE Inc., Co-Founder
- ALIFE Lab., Co-Founder
- Salzburg Global Seminar, Fellow
- MOTION GALLERY, Fellow

TV Programs:



March 09, 2026: BS Nippon TV
"Conbiz" In-depth coverage



February 12, 2021: BS Fuji "Esprit Japon" In-depth coverage (Also aired in France, New Zealand, and Australia)



March 22, 2020: BS Fuji
"Broadcasting Cultural Resources!"
Introduction of Ryuta Aoki's activities



January 31, 2020: Korean MBC "ART x TRIP" Introduction of the artwork "SOTOROJI #0"



September 27, 2015: Nippon TV
"SENSORS"
Art Hack Day Feature

Magazines & Newspapers:



September 22, 2022: Mainichi Shimbun
Interview about Japan Media Art Festival



July 16, 2022: Tokyo Shimbun
Introduction of the artwork "Bio Sculpture"



September 1, 2021: Sustainable Japan by The Japan Times
Introduction of the artwork "Bio Sculpture"



September 16, 2021: WIRED Japan Edition Vol.42
Introduction of the artwork "New Rousseau Machine"



September 1, 2021: AXIS Vol.213
40th Anniversary Special Edition
Activity Introduction



May 1, 2020: AXIS Vol.205
Interview

Internet TV Programs:



September 16, 2022: Agency for Cultural Affairs Media Arts Festival Award Commemorative Lecture



December 30, 2020: Multi-layered City "Makuhari City" Establishment Commemorative Exhibition Year-end Special (DOMMUNE)



October 31, 2017: Art Hack Day (DOMMUNE)



August 17, 2014: TEDxKobe Salon 2014 (TEDx)

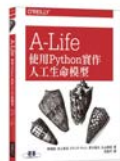


April 10, 2011: TEDxEarthquake9.0 (TEDx)

Books:



『ALife - Build and Run: Introduction to Artificial Life Model Theory through Implementation』(O'Reilly Japan, Inc, 2017)



『A-Life | Implementing artificial life model using Python』(GOTOP, 2019)

Scientific Papers:



「Constructing the co-creation community ALife Lab. for the co-evolution of humans and information technology」(May 2017)



「ALife as a Tool for Cooperative Society Between People and Machines」(Jul. 2018)



「Evolving Acoustic Niche Differentiation and Soundscape Complexity Based on Intraspecific Sound Communication」(Jul. 2020)



「Attempt of Sculpture for Social and Biological Environment by Japanese Style "Soil" 3D printing」(Oct 2021)

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R&D

- ANH
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- ALIFE Engine
- Living Architecture
- CCDLS

As an independent Curator

Art Exhibition

- DESIGNART 2024 Official Exhibition "Reframing"
- The Exhibition: Jack into the Noosphere
- The Exhibition of Makuhari City
- Japan Media Arts Distributed Museum:
Chubu Centrair International Airport
- Japan Media Arts Distributed Museum: Naha Airport
- Japan Media Arts Distributed Museum: Fukuoka Airport
- "Designs that Change the World" Exhibition

Performance

- Sound Tea Ceremony
- Glowing Tea Ceremony
- Shipboard Tea Ceremony

Conference

- Creative Futurists Initiative Symposium 2024
- METACITY CONFERENCE 2019
- ALIFE 2018
- Generative Ethics and Society
- COI 2021 Conference
- TEDxKids@Chiyoda 2014
- TEDxKids@Chiyoda 2013
- TEDxKids@Chiyoda 2012
- TEDxKids@Tokyo 2011
- TEDxTokyo yz 2010 Theater

Art Hackathon

- Art Hack Day 2018
- Craft Hackathon
- 3331a Art Hack Day 2016
- Kenpoku Art Hack Day
- 3331a Art Hack Day 2015
- 3331a Art Hack Day 2014

Sci-Fi Prototyping

- Civic Vision Sci-Fi Workshop Series
- SF Manga Design Research
- School for ALIFE

Installation Art



Alternative Computations, 2026

The Alternative Computations series sculpts the cosmologies of lost vernacular mathematics. Built from quantum noise — discarded by mainstream quantum computing — this automated instrument takes sky, earth, and human as its three-layer structure. Twenty-eight sangi (counting rods) orbit overhead as the Twenty-Eight Lunar Mansions. A tatami floor defines the sacred threshold. More than four thousand reeds fill the space.

• Artist: Ryuta Aoki

• Medium: Quantum reservoir computing system, machine learning, computer vision, sequencer, sound software, microcontroller firmware, meteorological data, camera, computer, microcontroller, custom motor system driving 28 sangi (wooden counting rods), speaker system, scaffold pipe structure, iron rings, tatami mats, reeds

• Size: Dimensions variable

• Exhibition: Alternative Computations — Worlds Otherwise Calculated , Spiral Garden , Tokyo , 2026

• URL: https://ryutaoki.jp/works/alternative-computations_2026/





Bio Sculpture, 2021

This work is an art project by Hiroya Tanaka Lab at Keio University SFC and METACITY, exploring "Technology for Multi-species" in the Anthropocene. Its aim is to reshape the relationship between humans and nature by opening up the scientific technologies and social systems developed by humanity to the natural world. The photo shows the work as it was exhibited at the art festival organized by Kitakyushu City. After the festival, it was transplanted as public art in the facility's garden. This piece was awarded in the Art Division of the 25th Japan Media Arts Festival.

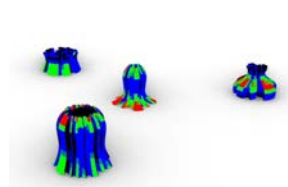
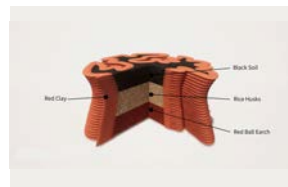
•Artist: Hiroya Tanaka Lab + METACITY (Ryuta Aoki)

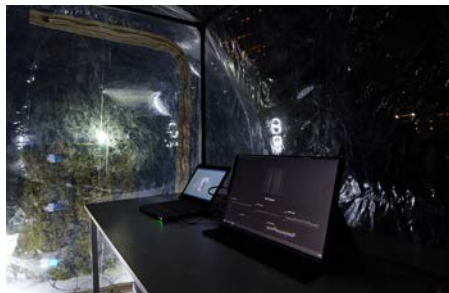
•Medium: Soil injection type 3D printer capable of 30m extension "NIWA", 3D-printed soil (mixed with red clay, black clay, akadama, and rice husks), Aluminum boards, Sensors

•Size: Dimensions variable

•Exhibition: Kitakyushu City Art Festival "Art for SDGs" (Curator: Fumio Nanjo)

•URL: https://ryutaoki.jp/works/bio-sculpture_2021





Bio Sculpture (Scene of a Future Portable Lab), 2021

The second work in the Bio Sculpture series, this piece was exhibited at the "Jack-in to the Noosphere" exhibition, held at night in a Japanese garden as part of Chiba City's first art festival, "Chiba City Festival of Arts." The Bio Sculpture series explores the development of technologies to purify air in a future where microplastic pollution has progressed to the extent that wearing masks has become essential in daily life. During the exhibition, actual data collection was conducted, and after the exhibition, it was relocated to a vacant lot for long-term observation, including soil microorganism analysis.

•Artist: Hiroya Tanaka Lab + METACITY (Ryuta Aoki)

•Medium: 3D-printed soil (mixed with red clay, black clay, akadama, and rice husks), Tent, Sensors

•Size: 800(D) x 800(W) x 1,500(H) mm

•Exhibition: Exhibition: "Jack into the Noosphere" Exhibition of Chiba City Festival of Arts

•URL: https://ryutaoki.jp/works/bio-sculpture_sfpb_2021





Bio Sculpture (Scene of a Future Boutique), 2022

The third work in the Bio Sculpture series, this piece was created for the 25th Japan Media Arts Festival Award-Winning Works Exhibition. It features a segment of a piece that was installed in Chiba City (Makuhari New City) for about a year. This work portrays a future where the original intent of the project is lost, and it is reduced to being bought and sold as mere decoration.

- Artist: Hiroya Tanaka Lab + METACITY (Ryuta Aoki)
- Medium: 3D-printed soil (mixed with red clay, black clay, akadama, and rice husks)
- Size: 800(D) x 800(W) x 600(H) mm
- Exhibition: Exhibition: The 25th Japan Media Arts Festival award-winning exhibition
- URL: https://ryutaoki.jp/works/bio-sculpture_sfb_2022





SOTOROJI #0, 2020

This work is an installation that ironically addresses "shopping spree" tourists by presenting an overwhelming number of over 120,000 QR codes, a number one could never view in a lifetime. It aims to shift the focus from material desires to spirituality. This piece is part of the SOTOROJI series, which expresses contemporary exterior spaces. With the cooperation of Nagoya City, it utilizes data from important cultural properties at Nagoya Castle. It was installed for about a year in the international arrivals concourse at Chubu Centrair International Airport.

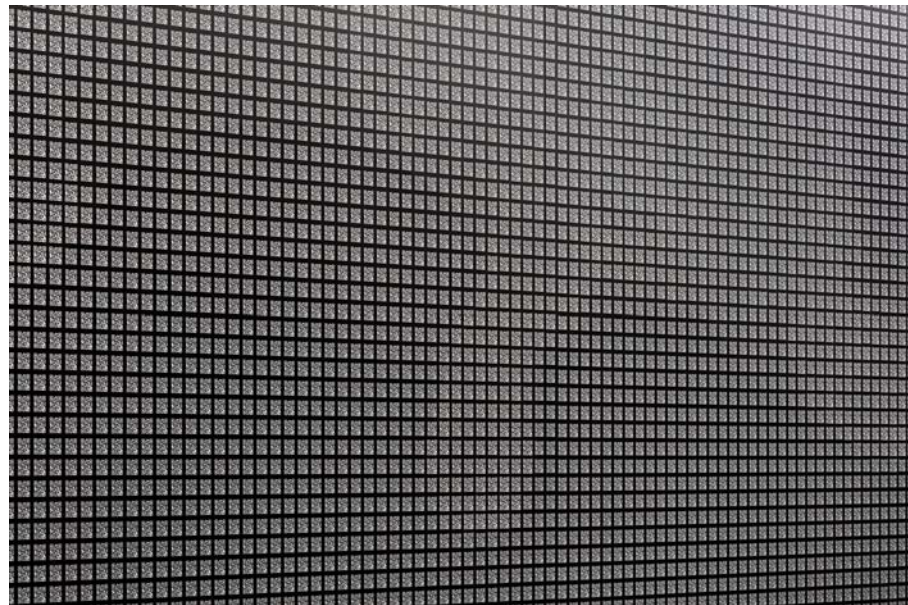
•Artist: The TEA-ROOM (Ryuta Aoki + Souryou Matsumura)

•Medium: QR codes, server system, stickers, tarpaulin

•Size: 1,500(W) x 2,000(H) mm per panel x 12 panels

•Exhibition: Chubu Centrair International Airport Exhibition of Japan Media Arts Distributed Museum

•URL: https://ryutaaki.jp/works/sotoroji_0_2020





SOTOROJI #1, 2021

This work is a spatial device that attempts to deviate from being slaves to capitalism by utilizing the newly installed affordances of modern humans through the QR code, a capitalistic technology. This piece is part of the SOTOROJI series, which expresses contemporary outer garden, 'sotoroji' in Japanese.

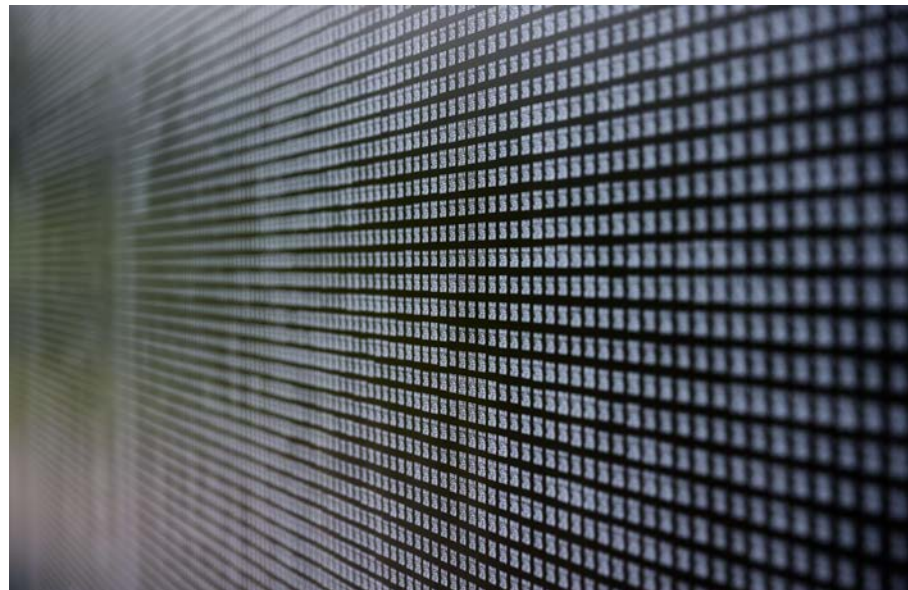
·Artist: The TEA-ROOM (Ryuta Aoki + Souryou Matsumura)

·Medium: QR codes, server system, stickers, tarpaulin

·Size: 9,000(W) x 2,700(H) mm

·Exhibition: "Jack into the Noösphere" Exhibition of Chiba City Festival of Arts

·URL: https://ryutaaki.jp/works/sotoroji_1_2021

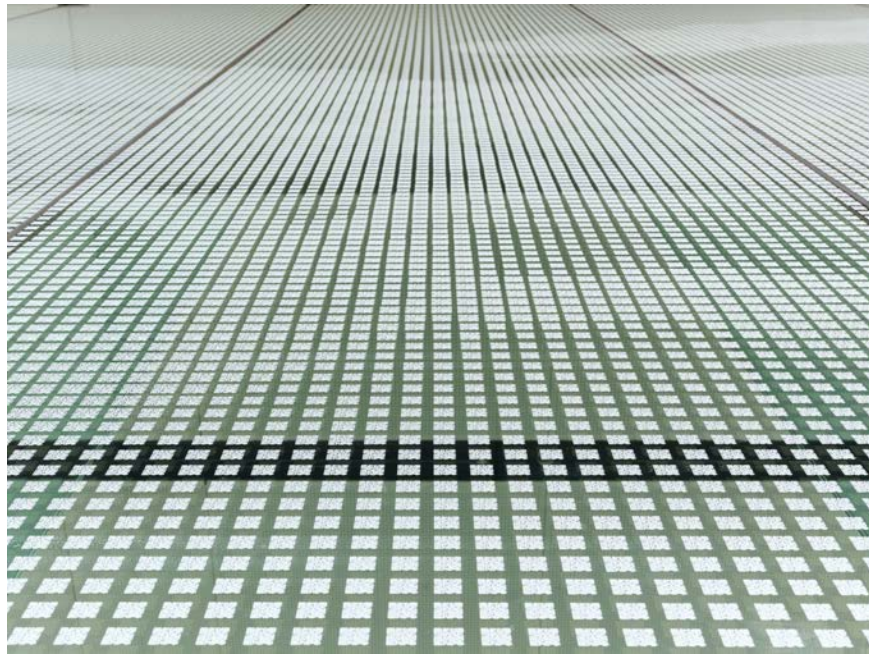




SOTOROJI #2, 2024

Just as the outer garden in the tea ceremony serves as a space that leads one into the mysterious and profound world of *yūgen*, SOTOROJI is also a spatial device, created by contemporary artists, that connects us to a world of imagination. The ancient pine, considered a sacred vessel of the deity of performing arts, is depicted through over 130,000 QR codes. This work serves as the boundary where physical and digital spaces, the everyday and the extraordinary, and reality and the ephemeral intersect. Here, the viewer is invited to test whether they can transcend the limits of their own thinking.

- Artist: The TEA-ROOM (Ryuta Aoki + Souryou Matsumura)
- Medium: QR codes, Server system, Optically clear film printing
- Size: 14,300(W) x 7,278(H) mm
- Exhibition: DESIGNART 2024 Official Exhibition "Reframe"
- URL: https://ryutaoki.jp/works/sotoroji_2_2024





SOTOROJI #3, 2024

This installation belongs to the SOTOROJI series. Just as the soto-roji—the outer garden of the Japanese tea ceremony—ushers guests from the everyday into the realm of yūgen, the work harnesses a contemporary affordance: when people see a QR code, they instinctively reach for their phone to scan it. Taking as its motif an ancient pine revered as a yorishiro for the deity of the performing arts, the piece renders the tree's form with more than 34,000 QR codes. The result is a threshold where physical and digital, ordinary and extraordinary, reality and the subtly profound intersect. Each scan invites the viewer to step from a finite game into an infinite one.

- Artist: The TEA-ROOM (Ryuta Aoki + Souryou Matsumura)
- Medium: QR codes, Server system, Panel printing
- Size: 4,250(W) x 3,590(H) mm
- Exhibition: Trusting the Unseen, Main Venue of Devcon 7 (QSNCC), Bangkok, Thailand, Nov. 12th - 15th, 2024
- URL: https://ryutaaki.jp/works/sotoroji_3_2024





New Rousseau Machine, 2021

If the rules for aggregating voting results change, the final voting outcomes may also change. This means that different public opinions can coexist simultaneously, and how we interact with these opinions can potentially change the world. Here, we refer to this as a "Schrödinger's cat" phenomenon of public opinion. This work addresses the importance and dangers of the tools that support democracy, even before considering public opinion or voting subjects.

- Artist: METACITY (Ryuta Aoki, Yasushi Sakai, Masahiro Sasaki, Yusuke Fujiwara)
- Medium: Leveling strings, screws, voting and aggregation system "New Rousseau Machine", blacklights, labels printed by Tepla (tape printing machine), temporary enclosures
- Size: 5,520(W) x 3,000(H) mm
- Exhibition: "Jack into the Noösphere" Exhibition of Chiba City Festival of Arts
- URL: https://ryutaoki.jp/works/new-rousseau-machine_2021

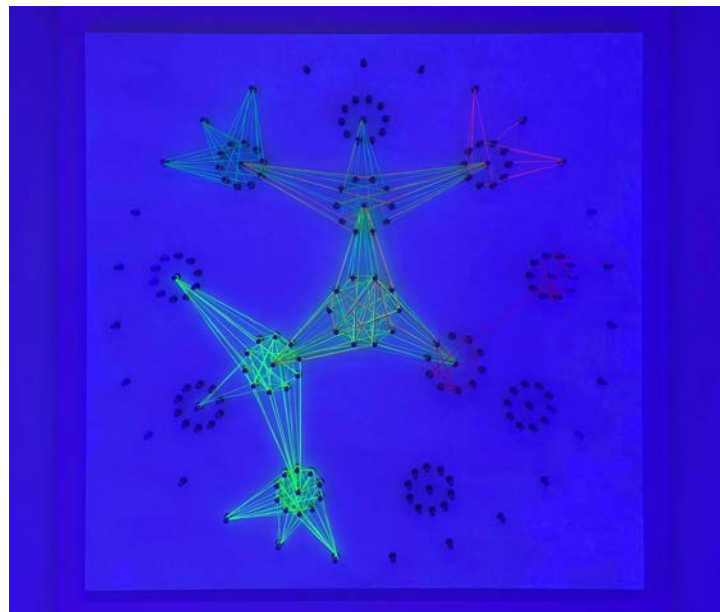




New Rousseau Machine (Kyoto Mounting Edition), 2021

This work was exhibited at the "2121 Futures In-Sight" exhibition, held at the 21_21 Design Sight, a design museum operated by the Issey Miyake Foundation and designed by Tadao Ando. It is part of the New Rousseau Machine series. With the cooperation of Masahiro Inoue, the third-generation head of Kyoto-based framing studio Inoue koga-do, the canvas was finished with traditional Japanese washi paper, creating a piece sized 900mm x 900mm.

- Artist: METACITY (Ryuta Aoki)
- Medium: Leveling strings, screws, voting and aggregation system "New Rousseau Machine", backlight, Kyoto mounting
- Size: 910(W) x 910(H) mm
- Exhibition: "The Year 2121: Futures In-Sight" Exhibition at 21_21 DESIGN SIGHT
- URL: https://ryutaaki.jp/works/new-rousseau-machine_kme_2021

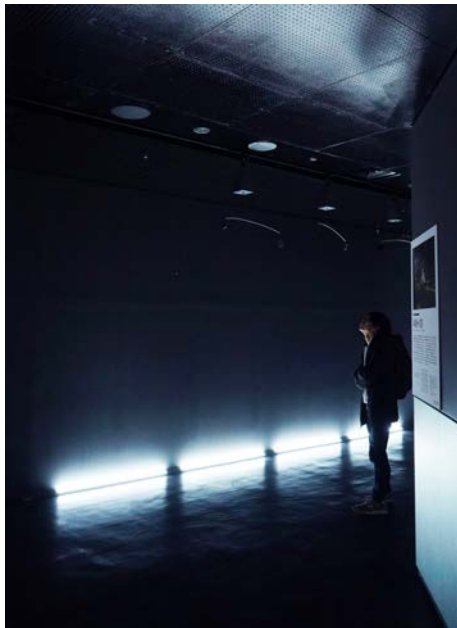




ANH-00, 2019

This work is based on the Acoustic Niche Hypothesis (ANH), which suggests that organisms evolve by partitioning sound space. It autonomously collects environmental sounds and generates new sounds that naturally fill the frequency bandwidths of the environment. By constructing and questioning possible forms of evolution, this piece expresses the ecosystem as a musical instrument. It is part of the ANH series.

- Artist: ALTERNATIVE MACHINE (Ryuta Aoki, Masumori Atsushi, Itsuki Doi, John Smith)
- Medium: Microphones, speakers, stick PCs, LED displays, genetic algorithm for evolution of digital agents, aluminum cases
- Size: 120(D) x 120(W) x 194(H) mm per unit x 5 units
- Exhibition: MUTEK.jp 2019
- URL: https://ryutaoki.jp/works/anh00_2019





ANH-01, 2021

This work was created for the "Jack-in to the Noosphere" exhibition, employing NEAT (NeuroEvolution of Augmenting Topologies) which integrates deep learning and genetic algorithms. The algorithm was updated to allow the system to evolve and acquire vocalizations, including pitch, through its own evolutionary process. The hardware was also improved to be installed outdoors for over 1.5 months. This piece is part of the ANH series.

• Artist: ALTERNATIVE MACHINE (Ryuta Aoki, Masumori Atsushi, Itsuki Doi, John Smith)

• Medium: Microphones, speakers, stick PCs, LED displays,

NeuroEvolution of Augmenting Topologies algorithm for evolution of digital agents, acrylic cases

• Size: 80(D) x 300(W) x 200(H) mm per unit x 5 units

• Exhibition: "Jack into the Noosphere" Exhibition of Chiba City Festival of Arts

• URL: https://ryutaaki.jp/works/anh01_2021

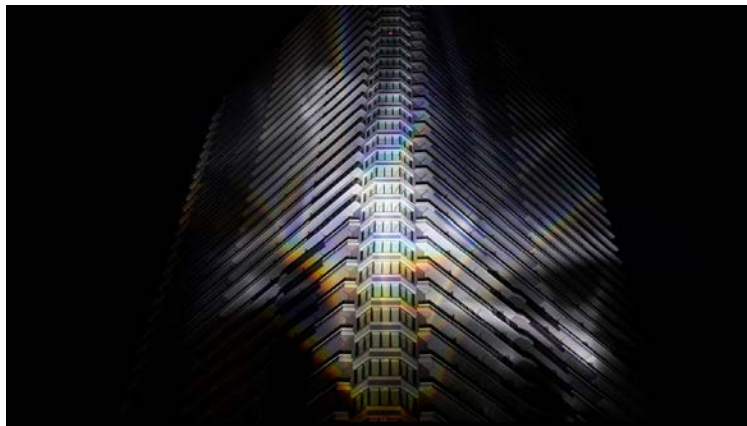




Artificial Moons, 2020

This work is a light sculpture themed around the reality that emerges from chains of chance. It explores the boundary between cultural realities of existence and virtuality, based on the moon-viewing culture that has existed across East Asia since ancient times, tracing back to Japan's Jomon period around 13,000 BCE. Nine moons in a virtual space exhibit unpredictable movements through an N-body simulation, known for the three-body problem. These movements are synchronized with 16 custom reflective lighting systems in the physical space, projecting the moonlight from the virtual space onto a massive 150-meter architectural structure. Displayed during the COVID-19 pandemic for approximately 1.5 months, it could be viewed from over a kilometer away.

- Artist: The TEA-ROOM + METACITY (Ryuta Aoki)
- Medium: 150m high building, reflective lighting system with moving lights, N-body simulation in VR, PCs
- Size: Dimensions variable
- Exhibition: The Exhibition of Multi-Layered City Makuhar
- URL: https://ryutaoki.jp/works/artificial-moons_2020/





Hello, Error!, 2021

Humans possess perceptual biases, such as the "halo effect" (or "halo error"). There's no doubt that our preconceived notions contribute to reinforcing power structures. In an era of deepfakes, where anyone can instantly manipulate realistic falsehoods using artificial intelligence, techniques akin to the "nijiriguchi" (a small, humble entrance in traditional Japanese tea rooms) are essential. Through this work, I aimed to extract and express "nijiriguchi"-like techniques to neutralize fiction, paradoxically exploring the mechanisms of falsehoods.

•Artist: The TEA-ROOM (Ryuta Aoki)

•Medium: Projector, super directional speakers, electric fan, the deepfake algorithm, pc, organdie

•Size: Dimensions variable

•Exhibition: "Jack into the Noosphere" Exhibition of Chiba City Festival of Arts

•URL: https://ryutaoki.jp/works/hello-error_2021





Simulated Consensus, 2024

Simulated Consensus sheds light on the latent risks inherent in collective decision-making conducted in collaboration between humans and AI. It questions the potential for manipulation and intervention that lies behind the superficial transparency and fairness of democratic voting systems.

· Artist: Ryuta Aoki

· Medium: LLM, projector, mesh screen, speakers, woofer, mic, chairs, partition

· Size: Dimensions variable

· Exhibition: AI · Human · Multiverse, National Asia Culture Center, Gwangju, South Korea, Nov. 22th - 27th, 2024

· URL: https://ryutaoki.jp/works/simulated-consensus_2024



R&D

(Note: Only publicly available projects are listed and R&D project primarily focused on artworks are not included in this section.)

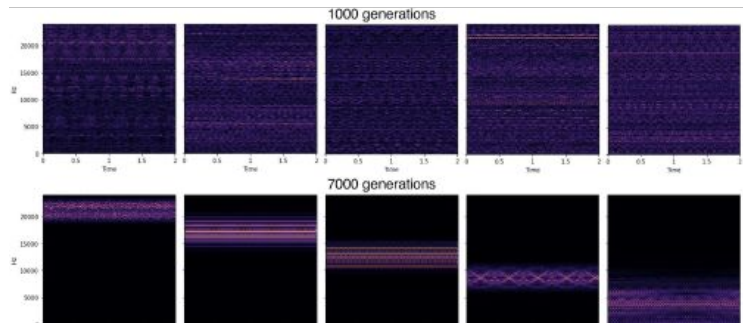


Figure 1: Spectrograms of generated sounds of agents. Figures in the upper panel show the spectrograms of voices of elite agents in each species at the beginning of the simulation (at 1,000 generations), and Figures in the lower panel show the spectrograms of the evolved voices (at 7,000 generations where the fitness values were already converged).

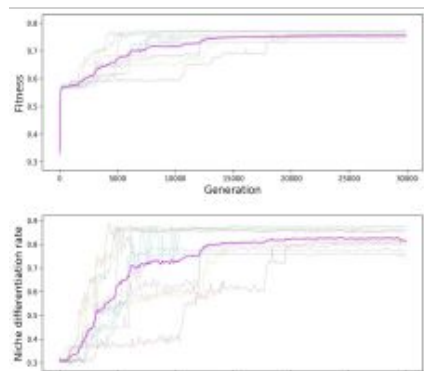


Figure 2: Fitness of the genetic algorithm and the niche differentiation rate increase through generations. The upper panel shows the time series of the fitness, while the lower panel shows the time series of the niche differentiation rate. The thick line represents the mean values of ten simulations, and the dotted line represents the values of each experiment.

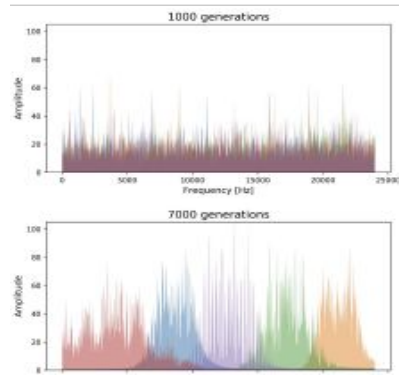


Figure 3: Frequency distributions of agents' voices. The up-per panel shows the distributions at the beginning of the simulation, showing that they are randomly scattered and over-lapped. The lower panel shows the distributions of evolved voices of the elite agents in each species, showing that the distributions converged to specific ranges, and the overlap became smaller than that in upper panel.

ANH

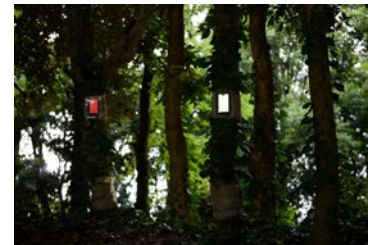
- Year: 2019-2022
- Partner: ISID
- Director: Ryuta Aoki
- Software Architecture Design and Development: Atsushi Masumori, Itsuki Doi
- Hardware Architecture Design and Development: Johnsmith
- Production: ALIFE Lab. ALTERNATIVE MACHINE Inc.
- Use Case: Soundscape Generator "ANH-00", "ANH-01"
- https://ryutaaki.jp/works/anh00_2019
- https://ryutaaki.jp/works/anh01_2021

In lush natural environments reminiscent of jungles, a diverse range of creatures emit calls for communication. Musician and acoustic ecologist Bernie Krause postulated that despite the complex cacophony of calls from various creatures, there's little interference in their communication. He theorized this is because each creature vocalizes at a distinct frequency or time slot. This concept is termed "The Acoustic Niche Hypothesis." The term "niche" in biology refers to the specific environmental conditions and resources that a species occupies and utilizes. Essentially, it's believed that wildlife has evolved their vocal communication methods to efficiently inhabit specific sonic niches within a particular environment or time frame. In urban areas, where there is a lack of biodiversity, there's a significant absence of sound frequencies, including those beyond the human audible range. It's suggested that this could physiologically and psychologically impact humans, who historically lived amidst nature's soundscape.

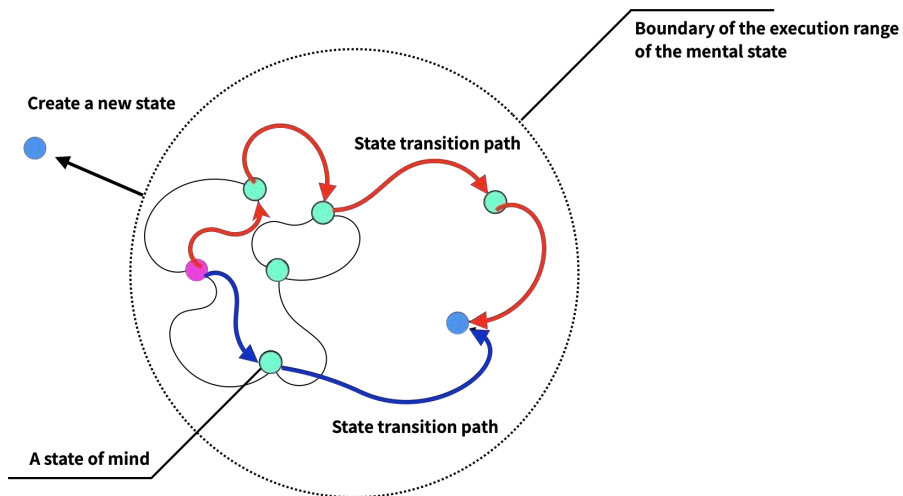
Drawing reference from this hypothesis, I embarked on research and development of devices that interact with environments and urban spaces through sound and frameworks that measure biodiversity from audio. The experimental apparatus developed was also showcased as an installation artwork.



ANH-00



ANH-01

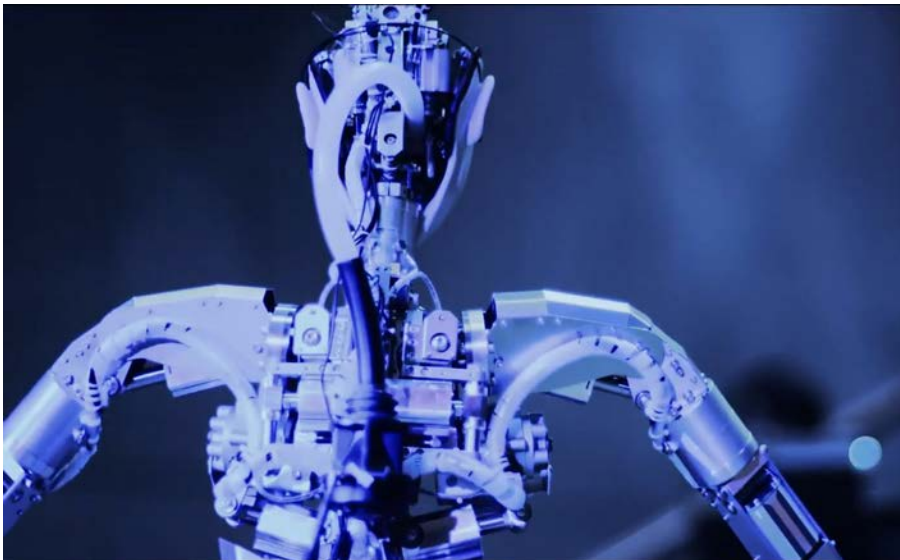


Research on the Richness of the Mind

- Year: 2018-2021
- Partner: JT
- Director: Ryuta Aoki
- Researcher: Takeshi Ikegami, Atsushi Masumori, Hiroki Kojima, Itsuki Doi
- Production: ALTERNATIVE MACHINE

To understand the richness of the mind, it seems there are limitations to the approach of design research, which abstracts its methodology subjectively based on specific individual events. One of the reasons for this is believed to be the inherent limitations in human subjectivity, which acts as a bottleneck, making it difficult to comprehend the true richness of the mind. Moreover, a significant reason is that understanding the dynamics of the mind underlying the richness is essential for a deep comprehension of the concept. In other words, a scientific approach is needed to grasp the dynamics of the mind to truly understand its richness. Furthermore, in the field of ALife, the mind has always been considered in an inseparable relationship with its body and environment. The richness of the mind is not merely confined within an individual but is believed to be understood only when one grasps the dynamics formed from relationships spanning from the body to the environment.

To understand the richness of the mind, Our team advanced research on the dynamics of the mind through an ALife approach, involving preliminary research surveys, various real-world experiences that induce transitions in psychological states, development of experimental apparatuses, and data analysis. Detailed findings will be presented in an upcoming scientific paper.



ALIFE Engine

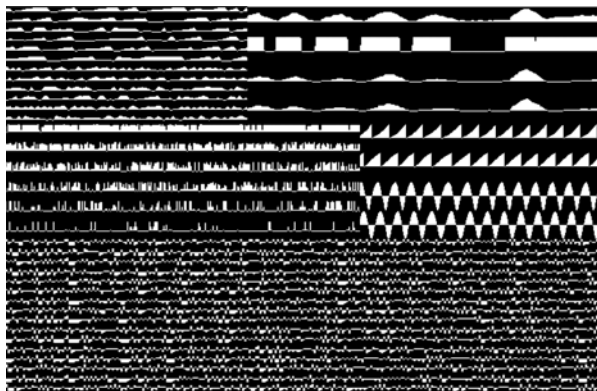
- Year: 2017-2019
- Director: Ryuta Aoki
- Core Architecture Design: Takashi Ikegami Lab. of the University of Tokyo
- Software Design & Dev: Takashi Ikegami, Itsuki Doi, Atsushi Masumori, Norihiro Maruyama
- Production: ALTERNATIVE MACHINE Inc.
- Use Case: Sound Installation “VOID SYSTEM”, Soundscape Generator “ANH-00”, Android “Alter 3”
https://ryutaaki.jp/works/alife-engine_2019

ALIFE Engine™ is a dynamics generation engine equipped with ALIFE technology for expressing life.

At the University of Tokyo, the Takashi Ikegami Laboratory developed prototypes of modules to express lifelike movements in Alter 1 and Alter 2. In the development of Alter 3, these were modularized, and new functions were added to install them not only in androids but also in other products, services, and systems.

Using STDP (Spike-timing-dependent synaptic plasticity), a module was developed that autonomously amplifies or attenuates transmission signals and structures them based on the firing order and interactions of neural network nodes. By utilizing neural networks for finger movements, the patterns and behaviors of each finger gradually evolve in accordance with the movements of the fingers.

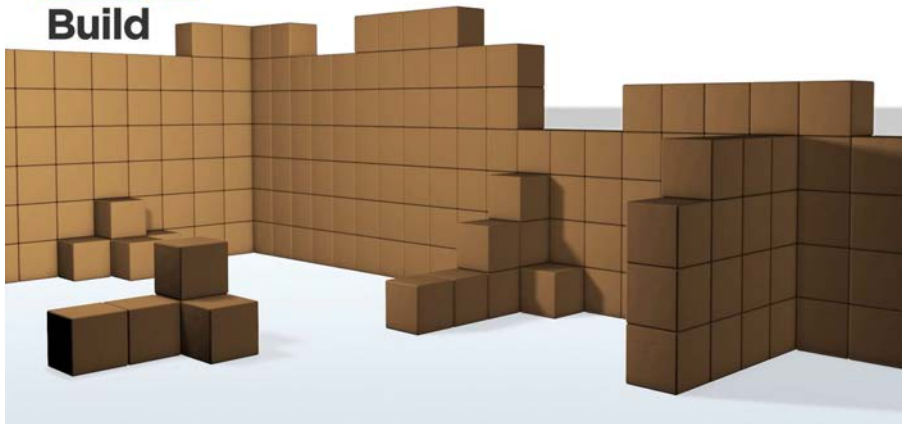
If an appropriate input-output relationship can be designed, it can be applied not only to the movements of androids but also, for example, to the realistic flickering of light, fluctuations in sound, or some kind of response.



Fabrication

Design

Build



Living Architecture

- Year: 2018
- Partner: LIFULL, VUILD
- Director: Ryuta Aoki
- Algorithm Design: Atsushi Masamori, Norihiro Maruyama, Lana Sinapayen
- Adviser: Takashi Ikegami
- Production: ALTERNATIVE MACHINE

https://ryutaaki.jp/works/living-architecture_2018

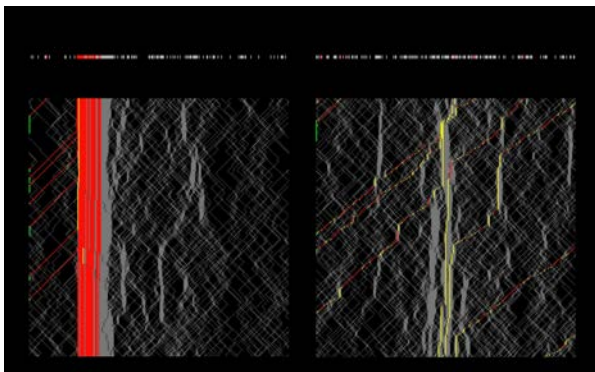
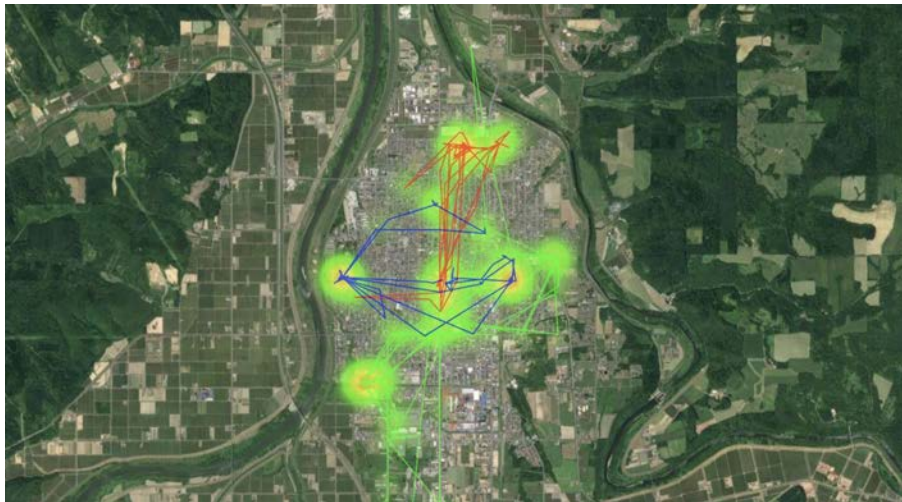
The project "Houses Becoming Family" applies the mechanism of "ant hills", which maintain and expand while keeping the internal temperature and humidity constant. It aims to develop an architectural model and algorithm that organically changes according to the residents and the environment.

It is said that by 2033, one in every three houses in Japan will be vacant. An attempt to reconstruct the emotional value that homes originally possessed is being undertaken as a joint research project by LIFULL, VUILD, and ALTERNATIVE MACHINE.

Using a 3D printer, clay is cut into the shape of a cube and then baked in a furnace. These baked cubes are considered the smallest parts, or the "cells" of the house. The environmental factors where the vacant house stands and the comfort index that residents feel, such as light and sound, are taken as evaluation criteria to determine the position of these cells. In this way, the shape of the house organically changes. It expands as if it's growing, aiming for the house itself to be like a family member that lives alongside its residents.



Citizen Cooperative-based Distributed Logistics System



·Year: 2017-2018

·Partner: DENSO

·Director: Ryuta Aoki

[Field Research]

·Interviewer: Ryuta Aoki, Narihiro Haneda (DENSO)

[Theoretical Verification (Simulation)]

·Algorithm Design: Norihiro Maruyama, Atsushi Masumori, Takashi Ikegami

·Production: ALTERNATIVE MACHINE

[Data Analysis]

·Design: Ryuta Aoki

·Programming: Kokoro Aoki (VOLOCITEE)

https://ryutaaki.jp/works/ccdls_2017

The "Citizen Cooperative-based Distributed Logistics System" envisions a paradigm shift in how goods are transported. By viewing each citizen's daily movements—whether it's commuting to work, school, or other activities—as potential nodes in a logistics network, the system aims to leverage collective cooperation to move items. More than just transportation, this innovative system fosters interpersonal interactions, potentially revitalizing communities.

Traditional logistics systems prioritize speed, efficiency, and cost-effectiveness, often delivering goods in large quantities at low costs. But is this always necessary? Do we truly need the book we purchased online to be delivered the next day when there might already be a pile of unread books at home? Surely, there are items we can wait a week for, rather than demanding next-day delivery.

Current logistics business models heavily depend on volume. With decreasing populations, especially in rural areas, we've seen a decline in transportation demand, leading to railway and bus route terminations. Similarly, logistics companies face downsizing or even withdrawal from certain areas. This has increased individual home delivery costs in regional cities, affecting local economies. If logistics companies pull out, delivery costs will skyrocket, devastating small-scale farmers and other micro-businesses.

Breaking away from the existing paradigm, a novel logistics system was sought to address the last-mile delivery challenges exacerbated by population decline. A joint research initiative was undertaken with DENSO Corporation. Nayoro City in Hokkaido, which was designated as a depopulated area in 2002 and has faced increasing railway closures and heightened concerns about logistics issues, was chosen as the model city.

Hearings were conducted with Nayoro City's mayor, logistics companies, and the citizens. Simultaneously, simulations were created to verify whether random movements of multiple individuals could feasibly reach designated points. Ultimately, the daily routines of 11 university students within the city were tracked for two months, with analyses performed on their routes and activity durations. There's potential in harnessing everyday activities of many individuals, made accessible through technology, to address community challenges. This system is about more than just transportation—it's an opportunity for communication, possibly invigorating local communities.

Performance



Sound Tea Ceremony, 2016

At the artist booth of the outdoor music festival 'TAICOCULB 2016', a tea ceremony was held to entertain artists from abroad, using a portable tea room.

Date: June 4th, 2016.

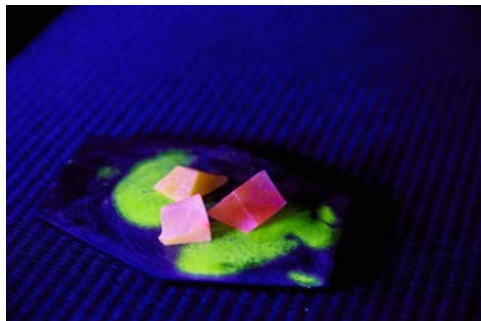
Location: TAICOCULB 2016

Type: Tea Ceremony, Spatial Design

Credit:

- Producer / Director: Ryuta Aoki
- Spatial Designer / Architect: Sano Fumihiko
- Tea Master: Souryo Matsumura
- Wagashi Artist: Shiwon
- Ceramic Artist: Kim Riyoo
- Graphic Designer: Takeshi Kawano
- Production Support: VOLOCITEE





Glowing Tea Ceremony, 2016

At the 'Halloween Pink Sensation' night event held on October 30, 2016, at Sanrio Puroland, a tea ceremony was conducted, offering glowing matcha and glowing Japanese sweets served in luminous tea utensils.

Date: October 30th, 2016

Location: Sanrio Puroland

Type: Tea ceremony, Spatial Design

Credit:

- Producer / Director / Project Manager: Ryuta Aoki
- Tea Master: Souryo Matsumura, Shuhally
- Wagashi Artist: Shiwon
- Architect: Fumihiko Sano
- Ceramic Artist: Kim Riyoo
- Visual Art (Projection): Kim Riyoo
- Painting: HouxoQue
- Production Support: VOLOCITEE





Shipboard Tea Ceremony, 2018

In a ship space supervised by architect Kengo Kuma, a program in three parts featuring sound, food, alcohol, and dance was created, themed around the bounty of five grains, utilizing utensils, calligraphy, flowers, sweets, and tea.

Date: September 28th, 2018.

Location: T-LOTUS M

Type: Tea ceremony and performance

Credit:

- Producer / Director: Ryuta Aoki
- Project Manager: Ryuta Aoki, Keita Uno
- Tea Master: Souryo Matsumura
- Wagashi Artist: Shiwon
- Calligrapher: Mami
- Ceramic Artist: Gentaro Yokoyama
- Bon Odori Performer: Bonjo
- Theatre Director: Gentaro Yokoyama



Art Exhibition

(Note: The exhibitions mentioned earlier are not included in this section.)



DESIGNART 2024 Official Exhibition “Reframing”

[ROLE] Co-curator

[YEAR] 2024 **[PLACE]** Tokyo **[LINKS]** [Event Page](#)

[TAGS] Art Exhibition

The official exhibition “Reframing” was held at the main venue of DESIGNART TOKYO, one of Japan’s largest design and art festivals. I served as a co-curator alongside contemporary-art curator Kodama Kanazawa, interior stylist and space designer Masato Kawai, and traditional-craft director Yudai Tachikawa. Taking “reframing” as its theme, the show presented works by eighteen creators spanning art, design, craft, and technology.

[ARTISTS] ARKO, Ben Storms, Human Awesome Error, Hiromine Nakamura, Jiabao Li, India Mahdavi, José Zanine Caldas, Kei Hasegawa, Kenji Hirasawa, Kenji Hirasawa & Yoshiaki Masuda (collaboration), Marion Baruch, Namae Myoji, nendo, nor, Noritaka Tatehana, ryo kishi, STUDIOPEPE, and The TEA-ROOM.





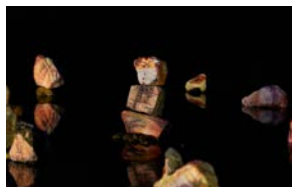
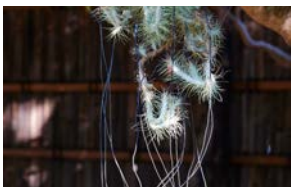
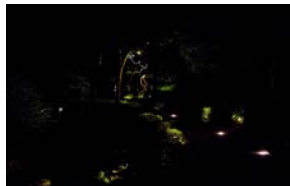
The Exhibition: Jack into the Noösphere

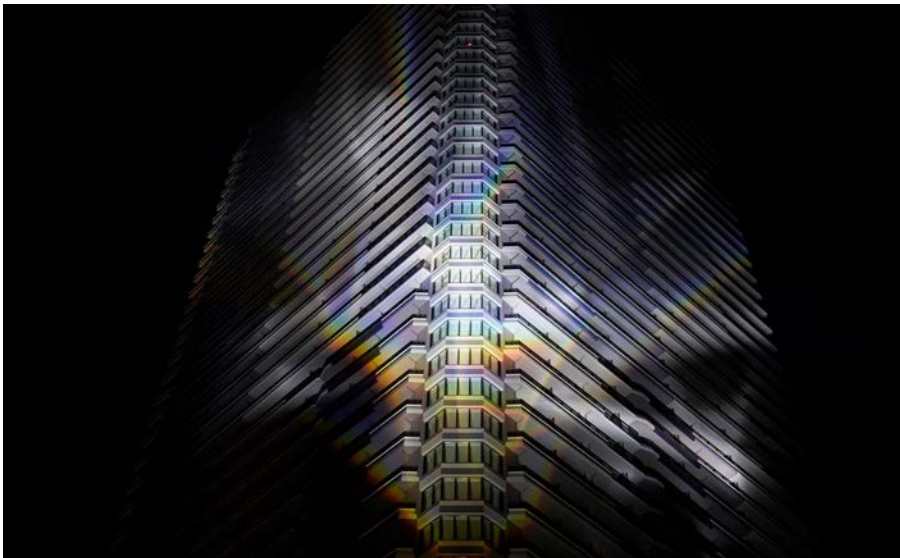
[ROLE] Artistic Director / Curator

[YEAR] 2021 **[PLACE]** Chiba **[LINKS]** [Event Page](#) [Archive Video](#)

[TAGS] Art Exhibition

In 2021, as one of the three categories held at Chiba City's first art festival, "Chiba City Festival of Art," we organized an exhibition featuring 16 works by 14 up-and-coming young artists in the fields of contemporary and media art. The exhibition was set in a Japanese garden at night and was designed to parallel the process of the traditional Japanese tea ceremony. Despite the restrictions due to the COVID-19 pandemic, an opening ceremony was held for invited guests, including Chiba Prefecture Governor Kumagai and Mayor Kamiya, as well as the media. According to a survey conducted by Chiba City, 97.6% of respondents said they enjoyed the event, and 94.8% said they would recommend the exhibition to friends and acquaintances. The event was covered not only in web media but also in print, including the 40th-anniversary special issue of the design magazine *AXIS* and the 40th-anniversary issue of the Japanese garden specialty magazine "Niwa." Nobuyuki Hayashi, a journalist with deep expertise in art and a board member of the James Dyson Foundation Japan, praised the exhibition in his article, stating, "It's as if the exhibition itself is a piece of conceptual art."





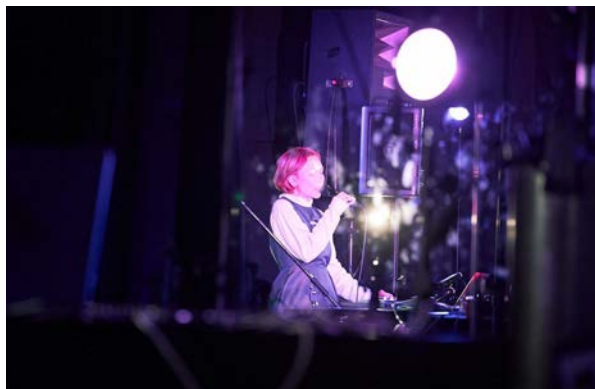
The Exhibition of Makuhari City

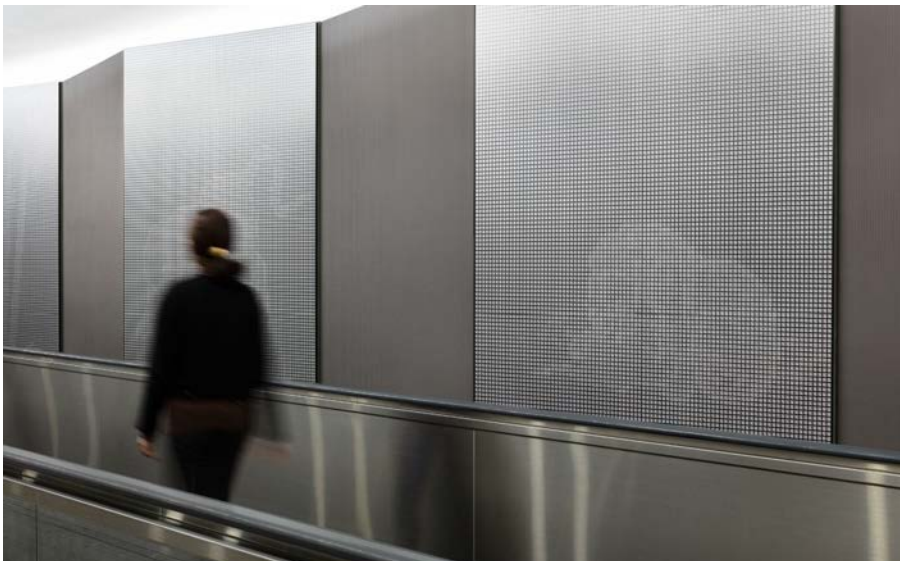
[ROLE] Executive Director / Curator / Artist / Speaker

[YEAR] 2020 **[PLACE]** Chiba **[LINKS]** [Official Website](#)

[TAGS] Art Exhibition, Talk Events, Workshops, Performance

From December 20, 2020, to January 31, 2021, we held a commemorative event for the art project "Multi-layered City 'Makuhari City,'" which prototypes a non-existent administrative district. The event featured art exhibitions, Sci-Fi prototyping workshops, and talk events. In collaboration with the tea ceremony art group "The TEA-ROOM," we produced and exhibited "Artificial Moons." This work illuminated a 150m building in Makuhari New City with artificial moonlight for 1.5 months, using the world's largest lighting system synchronized with a VR space. In collaboration with the Chiba-born Sci-Fi novelist group "DEAD CHANNEL," we held an online Sci-Fi prototyping workshop and published Sci-Fi short stories themed on the fictional city "Makuhari City." A newly written SF short story by Satoshi Ogawa, a member of DEAD CHANNEL and the winner of the 168th Naoki Prize, was also released. The talk event was broadcast as the year-end special program, the last program of 2020, at "DOMMUNE," Japan's first live streaming studio opened by Naohiro Ukawa, a contemporary artist who received the 71st Minister of Education, Culture, Sports, Science and Technology's Art Encouragement Prize. Ukawa and members involved in the "Multi-layered City 'Makuhari City'" project appeared on stage.





Japan Media Arts Distributed Museum: Chubu Centrair International Airport

[ROLE] Director / Curator / Artist

[YEAR] 2020 **[PLACE]** Aichi **[LINKS]** [Event Page](#) [Archive](#)

[TAGS] Art Exhibition

As part of the "Media Arts and Japanese Culture Promotion Project at Airports" initiated by Japan's Agency for Cultural Affairs, a "Japan Media Arts Distributed Museum" was rolled out at 10 domestic airports. One of these locations was Chubu Centrair International Airport, where the art collective "The TEA-ROOM," known for exploring new interpretations of the traditional Japanese tea ceremony, showcased their work "SOTOROJI #0." This installation was displayed in the international arrivals concourse, featuring 12 pieces that spanned a total length of 36 meters and remained on exhibit for one year. Created in collaboration with the city of Nagoya, the artwork drew inspiration from the fusuma paintings in the Honmaru Palace of Nagoya Castle, specifically "Bamboo Forest with Leopards and Tigers," "Maki, Maple, and Camellia," and "Civet Cat," all of which are designated as Important Cultural Properties of Japan.





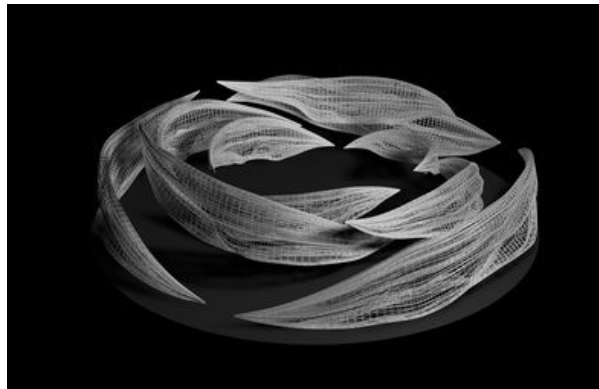
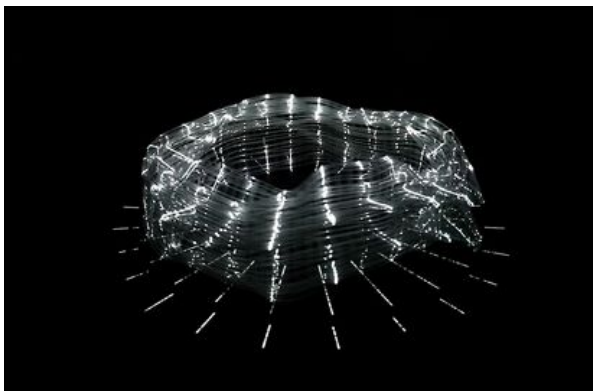
Japan Media Arts Distributed Museum: Naha Airport

[ROLE] Director / Curator

[YEAR] 2020 **[PLACE]** Okinawa **[LINKS]** [Archive](#)

[TAGS] Art Exhibition

As part of the "Media Arts and Japanese Culture Promotion Project at Airports" initiated by Japan's Agency for Cultural Affairs, a "Japan Media Arts Distributed Museum" was rolled out at 10 domestic airports. At Naha Airport, two works by up-and-coming artist Akinori Goto were exhibited. His new piece "Float#01" was exhibited in front of the domestic departures security checkpoint C, while "toki-BALLET #01" was displayed in the international arrivals concourse. The artworks were inspired by "Suimu Utaki," a sacred grove that miraculously survived the fire that devastated Shuri Castle, and were created with the hope for the castle's restoration.





Japan Media Arts Distributed Museum: Fukuoka Airport

[ROLE] Director / Curator

[YEAR] 2020 [PLACE] Okinawa [LINKS] [Archive](#)

[TAGS] Art Exhibition

As part of the "Media Arts and Japanese Culture Promotion Project at Airports" initiated by Japan's Agency for Cultural Affairs, a "Japan Media Arts Distributed Museum" was rolled out at 10 domestic airports. At Fukuoka Airport, the artwork "MOUNTAIN" by David O'Reilly, who has won the grand prize at Ars Electronica, the world's largest media art festival, was exhibited.





“Designs that Change the World” Exhibition

[ROLE] Producer / Director / Curator

[YEAR] 2012 [PLACE] Tokyo [LINKS]

[TAGS] Art Exhibition

At the "Trans Art Tokyo 2012" held in the abandoned building of the former Electric University, it was co-hosted with Granma Inc., who has been involved in the "Designs that Change the World" exhibition. Products for the exhibition were provided by Granma Inc., and it was held as the Trans Art Tokyo version, produced and curated by Ryuta Aoki. In developed countries, design targets only about 10% of the world's total population. The "Designs that Change the World" exhibition showcased designs for the remaining 90%. Alongside this, for the first time in Japan, the "Before I Die" project by TED speaker Candy Chang was implemented in the same venue.



Conference



Creative Futurists Initiative Symposium 2024

[ROLE] Creative Direction / Communication Direction / Production

[YEAR] 2024 [PLACE] Tokyo [LINKS] [Official Website](#) [WIRED](#) [Forbes](#)

[TAGS] Conference

The University of Tokyo, in collaboration with Sony Group Corporation, established the "Creative Futurists Initiative" at the University of Tokyo's Graduate School of Interdisciplinary Information Studies in December 2023. To commemorate the launch of the initiative, a kickoff symposium was held on February 22, 2024, at the University of Tokyo's Interfaculty Initiative in Information Studies (Fukutake Hall). Special Professor Shunji Yamanaka and Executive Vice President and CTO Hiroaki Kitano from Sony, along with other distinguished speakers from the University of Tokyo and Sony, participated in a panel discussion on addressing social issues through art, technology, and corporate activities, and on transdisciplinary co-creation.





METACITY CONFERENCE 2019

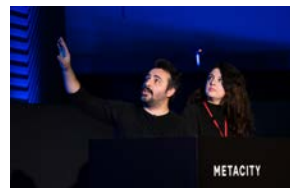
[ROLE] Executive Co-Director / Curator / Moderator

[YEAR] 2019 **[PLACE]** Chiba **[LINKS]** [Official Website](#) [Event Report](#)

[TAGS] Conference, Art Exhibition, Kids Workshop, Performance

On January 18-19, 2019, we held "METACITY CONFERENCE 2019" at Makuhari Messe International Conference Hall to commemorate the 30th anniversary of the opening of Makuhari Messe, Japan's largest convention center, as well as the establishment of METACITY. The event featured conferences, art exhibitions, and workshops over two days. The conference was attended by a total of 20 speakers from various fields, including administration, media, art, design, architecture, and religion. Notable speakers included Toshihito Kumagai, the Mayor of Chiba at the time, Michiaki Matsushima, the Editor-in-Chief of WIRED Japan, and Naohiro Ukawa, the organizer of DOMMUNE. The event received much acclaim.

Additionally, we exhibited works by the Turkish media art collective "Ouchhh," known for their global activities including exhibitions at NASA and the European Organization for Nuclear Research (CERN), for the first time in Japan.





International Conference on Artificial Life, "ALIFE 2018"

[ROLE] Executive Director

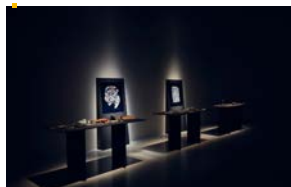
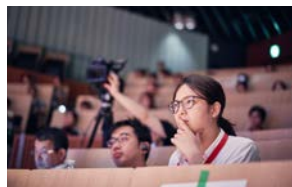
[YEAR] 2018 **[PLACE]** Tokyo **[LINKS]** [Artificial Life Conference Proceedings](#) [Pre-Conference](#)

[TAGS] Conference, Public Talk Events, Art Exhibition, Art Award, Art Hackathon, Kids Workshop, Opera Performance

From July 23 (Mon) to 27 (Fri), 2018, the international conference on artificial life, "ALIFE 2018," was held at the Miraikan (National Museum of Emerging Science and Innovation) in Japan. This was the first conference after the integration of American and European academic societies. Artificial life is a field of research that explores phenomena such as the origins of life, autonomy, self-replication, self-organization, and evolution through computation, robotics, and chemical reactions. To commemorate the Tokyo event, a pre-conference talk event open to the public, "ALIFE 2018: Pre-Conference," was held on July 22 (Sun), featuring researchers and artists from various fields both domestically and internationally. The event was live-streamed from the venue by Japan's first streaming program, "DOMMUNE."

During the reception, an android opera "Scary Beauty" by Keiichiro Shibuya was performed. An art award was also organized, with submissions from both domestic and international applicants, and the winning works were exhibited during the conference. The event was co-hosted with Art Hack Day, Japan's first art hackathon, where 61 artists, researchers, and engineers participated, producing 12 works based on the theme of artificial life.

Concurrently, the 20th term of the Miraikan Media Lab was held, supervised by Takashi Ikegami, the General Chair of "ALIFE 2018." Two award-winning works were exhibited for six months. In collaboration with fermentation designer Hiraku Ogura, a device for monitoring fermentation states was developed, and a workshop for children was also conducted.





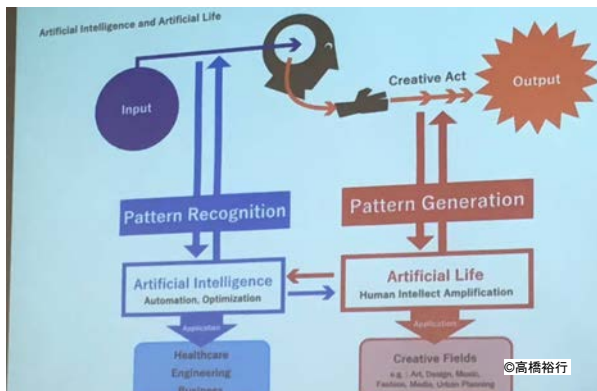
Generative Ethics and Society

[ROLE] Executive Director

[YEAR] 2017 [PLACE] Tokyo [LINKS] [Event Page](#)

[TAGS] Conference

On May 13, 2017, a conference was held at the Komaba Campus of the University of Tokyo with the subtitle "Ethics of Artificial Intelligence and Artificial Life and the Society Surrounding It." Despite the niche theme, the conference attracted a diverse group of top players from various fields, including researchers and artists, to discuss ethical issues. Although the capacity was limited to 40 people, there were 75 applicants, including researchers, lawyers, and artists, demonstrating significant interest in the topic.





COI 2021 Conference

[ROLE] Symposium Planning / Art Director

[YEAR] 2016 **[PLACE]** Tokyo **[LINKS]** [Official Facebook Page](#) [Event Page](#)

[TAGS] Symposium, Workshop

On January 29, 2016, a conference called "COI 2021 Conference" was held at the National Olympic Memorial Youth Center to present cutting-edge research aimed at realization by 2021. COI (Center of Innovation) is a research and development program initiated by the Ministry of Education, Culture, Sports, Science and Technology in 2011. COI focuses on how "people will change" and how "society will change" 10 years from now, envisioning the desired future society. It involves collaborative research and development at 18 locations nationwide, where companies and universities work together. The conference was organized to facilitate information sharing and networking among researchers and companies at each location, with the expectation of generating ideas and collaborations for social implementation. Media artist Koichiro Eto served as the executive chairman for the conference.

On the first day, a symposium was held where lead researchers from each location presented their research. The event was open to the general public and received applications exceeding its capacity of 250 people, making it a full house. On the second day, a workshop was held in an "unconference" format, attended only by stakeholders. About 100 researchers, including Joi Ito, the Director of the MIT Media Lab, participated in the workshop.





TEDxKids@Chiyoda 2014

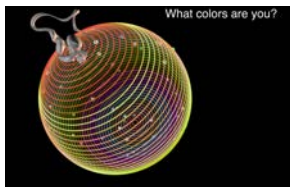
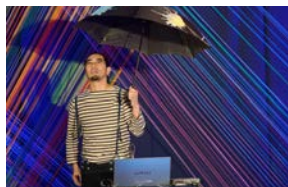
[ROLE] Licencee / Executive Director / Curator

[YEAR] 2014 **[PLACE]** Tokyo **[LINKS]** [Official Website](#) [Key Visual Video](#)

[TAGS] Conference, Workshop

On November 30, 2014, the fourth installment of the conference "TEDxKids" was held at 3331 Arts Chiyoda. The conference aimed to share valuable ideas with children who will shape the future and adults who create environments for children. Licensed from the U.S. TED Conference, it was first held in Japan in 2011. This year's theme was "Unknown Colors," and the event curated 12 adults and 8 children, with a total of 20 speakers sharing valuable ideas. In addition, workshops on programming and Strawbees (crafting with straws) were held, with the Swedish representative of Strawbees coming to Japan to participate as a facilitator. A reception party was held after the event, which children also attended.

The venue design, which utilized a total of 35 km of thread (equivalent to the length of one loop around the Yamanote Line), was selected as "Great TEDx Stage Design" on the official TEDx blog. All the thread used in the venue design was donated to artists and NPOs after the event. The conference was not only conducted in English but also featured simultaneous sign language interpretation and was live-streamed on the internet.





TEDxKids@Chiyoda 2013

[ROLE] Licensee / Executive Director / Curator

[YEAR] 2013 **[PLACE]** Tokyo **[LINKS]** [Official Website](#) [Digest Video](#) [Tether Video](#)

[TAGS] Conference, Workshop

On November 4, 2013, a public holiday, the third installment of the conference "TEDxKids" was held at 3331 Arts Chiyoda. The conference aimed to share valuable ideas with children who will shape the future and adults who create environments for children. Licensed from the U.S. TED Conference, it was first held in Japan in 2011. This year's theme was "I will ...," and the event curated 14 adults and 6 children selected through kids' auditions, with a total of 20 speakers sharing valuable ideas.

In addition to the main program, a workshop using an environmental simulator was conducted by Mr. Masatoshi Funabashi, a researcher at SonyCSL, who was also one of the speakers. A reception party was held after the event, which children also attended. The conference was not only conducted in English but also featured simultaneous sign language interpretation and was live-streamed on the internet.





TEDxKids@Chiyoda 2012

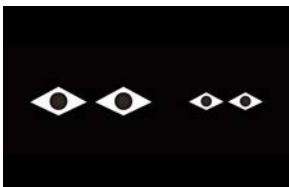
[ROLE] Licencee / Executive Director / Curator

[YEAR] 2012 **[PLACE]** Tokyo **[LINKS]** [Official Website](#) [Digest Video](#)

[TAGS] Conference, Workshop

On October 28, 2012, the second edition of the conference "TEDxKids" was held at 3331 Arts Chiyoda. The conference aimed to share valuable ideas with children who will shape the future and adults who create environments for them. Licensed from the U.S. TED Conference, it was first held in Japan in 2011. This year's theme was "re__ (Reconstructing Relationships)," and the event featured 16 adults and 3 children (of which 2 were selected through kids' auditions), with a total of 19 speakers sharing valuable ideas.

A reception party was held after the event, which children also attended. The key visual for the event was created by Mamoru Harano, a creative director who was also selected for TED: Ads Worth Spreading in 2012. The conference was conducted not only in English but also featured simultaneous sign language interpretation and was live-streamed on the internet.





TEDxKids@Tokyo 2011

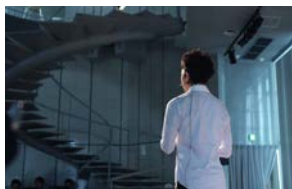
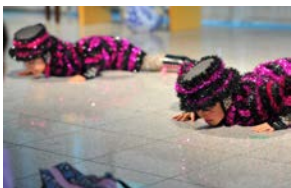
[ROLE] Licencee / Executive Director / Curator

[YEAR] 2011 **[PLACE]** Tokyo **[LINKS]** [Tether Video](#)

[TAGS] Conference, Workshop

On October 28, 2011, the conference "TEDxKids" was held at CARATO71 in Daikanyama. The event aimed to share valuable ideas with children who will shape the future and adults who create environments for them. Licensed from the U.S. TED Conference, this was the first time the event was held in Japan. The theme was "History of the 21st Century," and the event featured 9 adults and 3 children, with a total of 12 speakers sharing valuable ideas.

In addition to the main program, a workshop was conducted in collaboration with artist Kenji Yanobe. A reception party was held after the event, which children also attended. The venue was decorated with Kenji Yanobe's artwork "Torayan," adding to the atmosphere of the event.





TEDxTokyo yz 2010 Theater

[ROLE] Executive Director

[YEAR] 2010 **[PLACE]** Tokyo **[LINKS]** [Official Website](#)

[TAGS] Conference

On November 17, 2010, "TEDxTokyo yz" was held at Time Out Café & Diner in Ebisu, aimed at Generations Y and Z. A total of 7 speakers took the stage to share valuable ideas. The event was held on a Wednesday evening to create a space where people could easily drop by after school or work. The venue was filled with over 100 attendees. The atmosphere was kept casual and free, complete with attendees dressed in fox and chicken costumes.



Art Hackathon



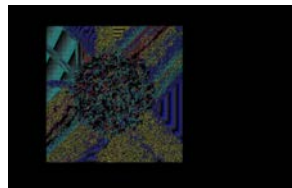
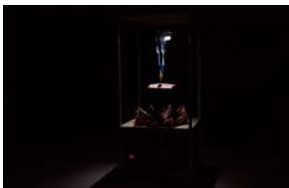
Art Hack Day 2018

[ROLE] Executive Director / Facilitator

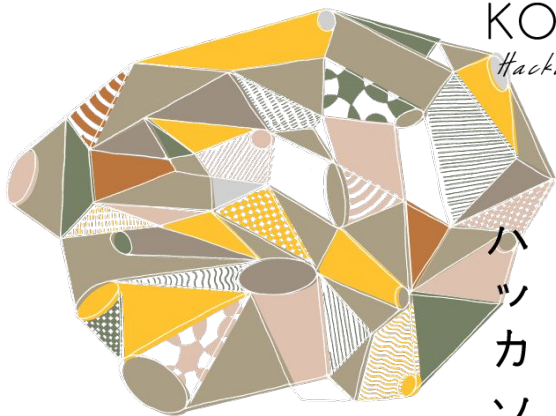
[YEAR] 2018 **[PLACE]** Tokyo **[LINKS]** [Official Website](#)

[TAGS] Art Hackathon, Talk Events, Workshops, Art Exhibition

On February 3 to March 18, 2018, Japan's first art-focused hackathon, "Art Hack Day," and its resulting exhibition were held at the National Museum of Emerging Science and Innovation (Miraikan) with a grant from Arts Council Tokyo. The event was co-hosted with the international conference on artificial life, "ALIFE 2018," and marked the fourth installment of Art Hack Day. In this event, artists, engineers, and researchers who were selected through an application process gathered to form teams on the spot and create art pieces through their unique processes over one to two months. This year, 61 people participated, forming 12 teams that produced 12 works of art. The two works that won the grand prize and special prize were exhibited for six months in Miraikan's permanent "Media Lab" exhibition.



アート × 伝統産業 × 先端技術
日本の手仕事と、アートや先端テクノロジーが出会う4日間。



Innovative
KOGAI
Hackathon

国際北陸工芸サミット
工芸
ハッカソン

開催地：富山県高岡市

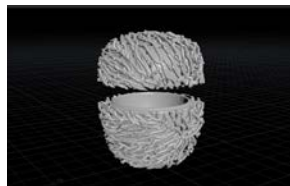
International Hokuriku Craft Summit: Craft Hackathon

[ROLE] Planning Advisor specializing in program design support

[YEAR] 2017 **[PLACE]** Toyama **[LINKS]** [Official Website](#)

[TAGS] Art Hackathon

From September 23 to November 19, 2017, an art hackathon called "Kougai Hackathon" was held in Takaoka City, Toyama Prefecture, as part of the International Hokuriku Craft Summit. The event was modeled after the Art Hack Day program. Artists, engineers, researchers, and local craftsmen from Takaoka City were selected through an application process to participate. A total of 37 individuals participated, forming 7 teams that produced 7 works of art. One of the created works received an Excellence Award in the Art Division of the 23rd Japan Media Arts Festival.





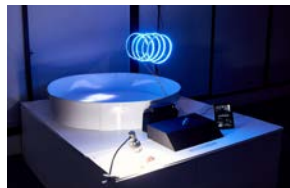
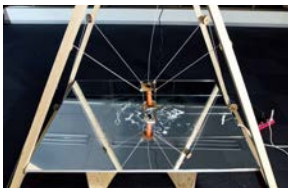
3331a Art Hack Day 2016

[ROLE] Executive Director / Facilitator

[YEAR] 2016 **[PLACE]** Tokyo **[LINKS]**

[TAGS] Art Hackathon, Talk Events, Workshop, Art Exhibition

From November 5th to November 27th, 2016, we rented out an abandoned building in Kayabacho to host Japan's first art-focused hackathon, "Art Hack Day," along with an exhibition to showcase the results. This marked the third installment of Art Hack Day. The event brought together artists, engineers, and researchers selected through an application process. These participants formed teams on the spot and created art pieces through their own unique processes over the course of one to two months. This year, 60 people participated, forming 12 teams that produced 12 works of art. As a pre-event, we collaborated with Fujitsu Techshop to host experiential workshops and also organized talk events featuring past winners. After the event, the grand prize-winning team used the 3331a Studio to unveil their new work.





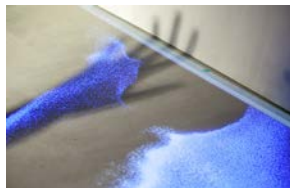
Kenpoku Art Hack Day

[ROLE] Executive Co-Director / Facilitator

[YEAR] 2015 **[PLACE]** Tokyo / Ibaraki **[LINKS]** [Official Website](#) [Digest Video](#)

[TAGS] Art Hackathon

From October 24th to November 8th, 2015, we hosted an art hackathon called "Kenpoku Art Hack Day" as part of the social program for the Ibaraki Prefecture Northern Art Festival, set in the northern region of Ibaraki Prefecture. The event was co-directed with Chiaki Hayashi, who serves as the Communication Director for the Ibaraki Prefecture Northern Art Festival and is also the co-founder of Loftwork. Artists, engineers, and researchers were selected through an application process to participate. A total of 64 individuals took part, forming 15 teams that produced 15 works of art. The three award-winning pieces were subsequently exhibited at the Ibaraki Prefecture Northern Art Festival "KENPOKU ART 2016".





3331α Art Hack Day 2015

[ROLE] Executive Director / Facilitator

[YEAR] 2015 **[PLACE]** Tokyo **[LINKS]**

[TAGS] Art Hackathon, Talk Events, Art Exhibition

From August 14th to September 13th, 2015, we hosted Japan's first art-focused hackathon, "Art Hack Day," and its subsequent exhibition at 3331 Arts Chiyoda. This marked the second installment of Art Hack Day. The event brought together artists, engineers, and researchers who were selected through an application process. These participants formed teams on-site and created art pieces through a unique process over the course of one to two months. This year, 63 individuals participated, forming 12 teams that produced 12 works of art. Yoichi Ochiai was a guest speaker at the talk event. The event was featured on the Nippon Television Network program "SENSORS." After the event, the team that won the Masato Nakamura Prize held an exhibition at 3331 Arts Chiyoda, where they unveiled a new piece that later won the Jury Prize at the Kiyos no Kuni Gifu Art Festival in 2017. Two of the award-winning works were also exhibited at the Ibaraki Prefecture Northern Art Festival "KENPOKU ART 2016".



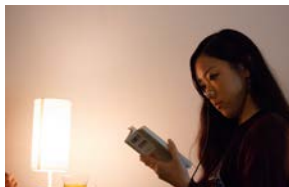
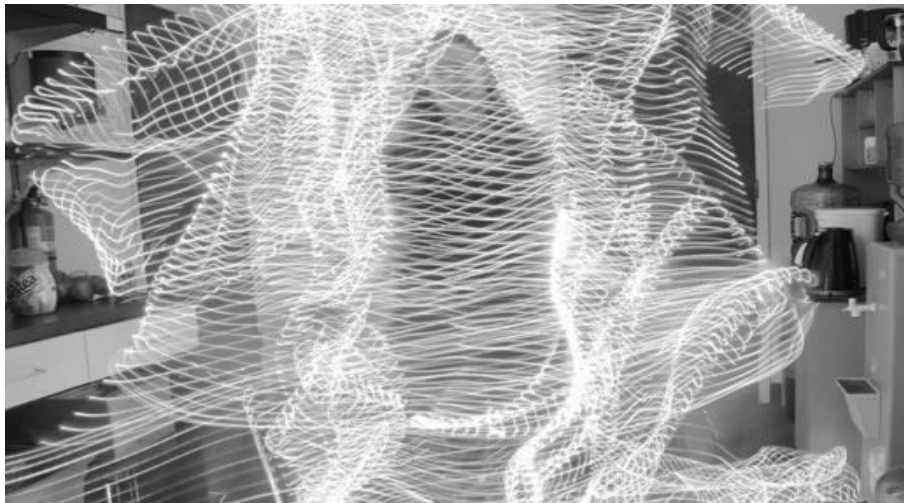
3331α Art Hack Day 2014

[ROLE] Executive Director / Facilitator

[YEAR] 2014 **[PLACE]** Tokyo **[LINKS]**

[TAGS] Art Hackathon, Talk Events, Art Exhibition

From August 23rd to September 7th, 2014, we hosted Japan's first art-focused hackathon, "Art Hack Day," along with its subsequent exhibition at 3331 Arts Chiyoda. The event was part of the Chiyoda Art Festival 2014's Interaction category and marked the inaugural installment of Art Hack Day. The hackathon gathered artists, engineers, and researchers who were selected through an application process. These participants formed teams on-site and created art pieces through a unique process over one to two months. This year, 50 individuals participated, forming 10 teams that produced 10 works of art. Seichi Saito was a guest speaker at the talk event. After the event, an exhibition was also held at Loftwork. One of the award-winning works was later performed at the Japan Pavilion at the Milan Expo.



Sci-Fi Prototyping



School For ALife

人工生命を学ぶ実践型教育プログラム

「生命性をインストールせよ」

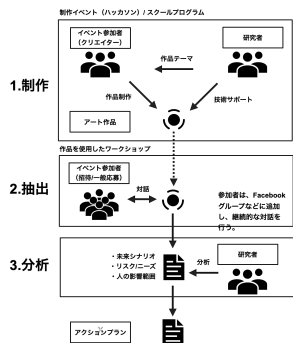
School for ALIFE

[ROLE] Co-Director

[YEAR] 2017 [PLACE] Tokyo [LINKS] [Event Page](#) [Scientific Paper](#)


[TAGS] Sci-Fi Prototyping

With the aim of developing new methods to communicate and integrate research findings into society, we conducted Sci-Fi Prototyping focused on the field of artificial life. This involved co-creation between researchers and artists. Eleven artists and creators participated through an open call. The program was conducted over a total of five days, including two days of research lectures, two days of creation mentored by professional editors, and a day open to the public. During the presentation, nine science fiction short stories created by the participants were read aloud by two actors. The project was selected and carried out as part of the "Human and Information Ecosystem (HITE)" initiative by the Research Institute of Science and Technology for Society (RISTEX) under the Japan Science and Technology Agency (JST).



<p>Antiquity</p> <p>Ancient myths and stories</p> <p>Automata in the form of sutured man of metal, and animated by the god of metalworking, Hephaestus. For example: Brazen Bull, Talos, and Colchian Horses.</p> <p>Ancient China</p> <p>Automata found in the Lie Zi text. It described a life-like human-shaped figure which was able to walk with rapid strides, to move its head up and down, to see, and to sing so that anyone would have taken it for a living human being.</p>	<p>1206 Jewish Mythology</p> <p>Golem, or the legend of the artificial man: an animated being made from inanimate matter (usually mud, clay or similar material).</p> <p>First Automata</p> <p>Al-Jazari designed a number of automata including the first programmable humanoid robot.</p>	<p>1495-1515</p> <p>Leonardo da Vinci designed at least two automata. A mechanical knight in the form of a humanoid automaton that could stand, sit, raise its visor and independently manoeuvre its arms, and a mechanical lion which could walk forward and open its chest to reveal a cluster of tiles.</p> <p>1585</p> <p>A legend says that Juanelo Turiano created an automata called "The Stick Man" that begged in the streets, and when someone gave him a coin, he bowed.</p> <p>1650</p> <p>Rene Descartes considered the living to be mechanical similar to clockwork. Still, Descartes did not consider the soul to be mechanical, leading to dualism.</p> <p>1651</p> <p>Albertus Magnus' brazen head (a legendary automaton reputed to be able to answer any question) and its mechanical servant (which advanced to the door when anyone knocked and then opened it and saluted the visitor).</p>	<p>1680-1774</p> <p>Philosophy</p> <p>Pierre Jaquet-Droz built the three most complex and famous automata of the XVIII century: The Writer (made of 2500 pieces), The Musician (2000 pieces), and The Draughtsman (2000 pieces).</p> <p>1810</p> <p>Literature</p> <p>Mary Shelley published her novel named "Frankenstein".</p>	<p>1739</p> <p>Modern Automata</p> <p>Jacques de Vaucanson created an artificial duck which had thousands of moving parts. The duck appeared to eat, drink, digest and defecate.</p> <p>1951</p> <p>First Formal models</p> <p>John von Neumann created the first formal ALife model (although he did not call it as such). In particular he was interested in self-replication, a fundamental feature of life.</p> <p>1951-1985</p> <p>Alternatives to von Neumann's universal constructor were later proposed by Cool, Banks, and Langton, for example. Formalization and further development of cellular automata continued during these years.</p> <p>1960</p> <p>Parallel to these studies, cybernetics and systems research described phenomena in terms of their function rather than their substrate, so similar principles were applied to animals and machines alike.</p> <p>1966</p> <p>Definition of the term "ALife"</p> <p>The field of "artificial life" was inaugurated by Langton, when he organized the first "Workshop on the Synthesis and Simulation of Living Systems".</p>
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contact@volocitee.com