



Christian Schwarz

ILAR - Collective for Computational Arts

Contact:

IG: @ilar.xyz

E: schwarz@ilar.xyz

W: ilar.xyz

Multi-Purpose Tower

2025 | Algorithmic Sound Installation

Materials: Custom Software, RaspberryPi, Aluminium, 4-channel audio, amplifiers

Exhibited at ARKO Art Center, Seoul | South Korea

MPT-1 is the first result of appropriating a common method of deception by giving technology a secondary use - in this case a cellphone-tower being a bench. Through speakers embedded in the antenna-cases, the audience can listen to an algorithmic composition made by sampling the frequency-spectrum used for mobile communication and speculate on their encrypted messages.



Free Labour

2025 | Algorithmic Composition for Industrial Cranes

Materials: DC Motors, Custom Software, RaspberryPi, Aluminium

Exhibited at *Lothringer13*, Munich | Germany

FL is a generative installation that transforms *Lothringer13* Halle's industrial infrastructure into a self-regulating, machinic choreography. Installed in the main hall, the work activates the space's three overhead cranes, each equipped with custom-made motors and logged into a shared network that allows them to continuously communicate with one another.



2,5e-7 second loss

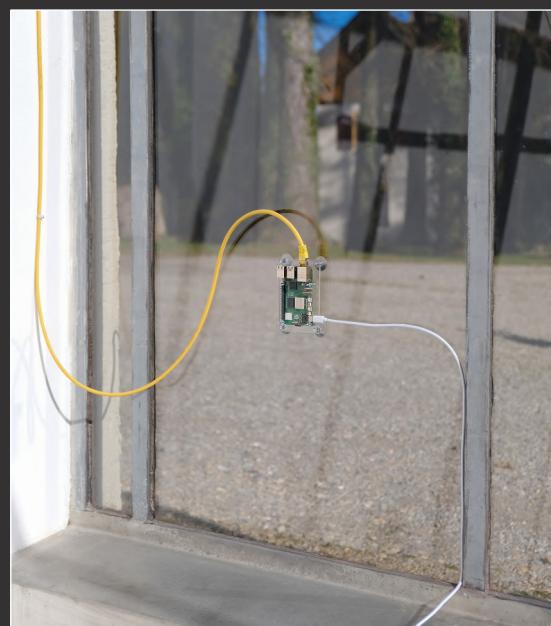
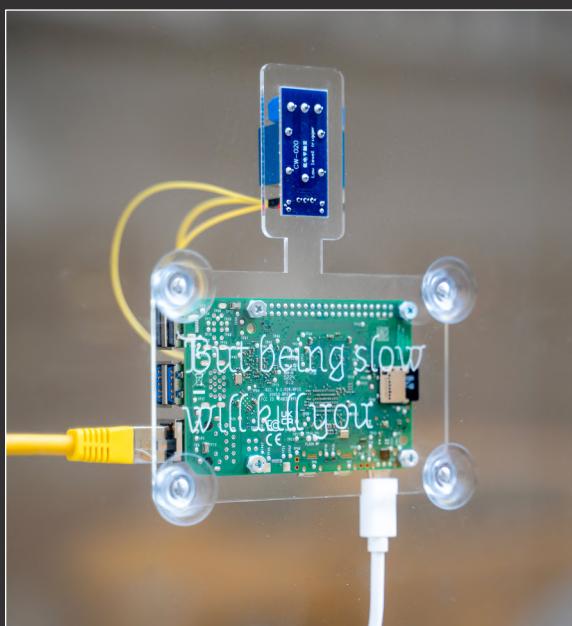
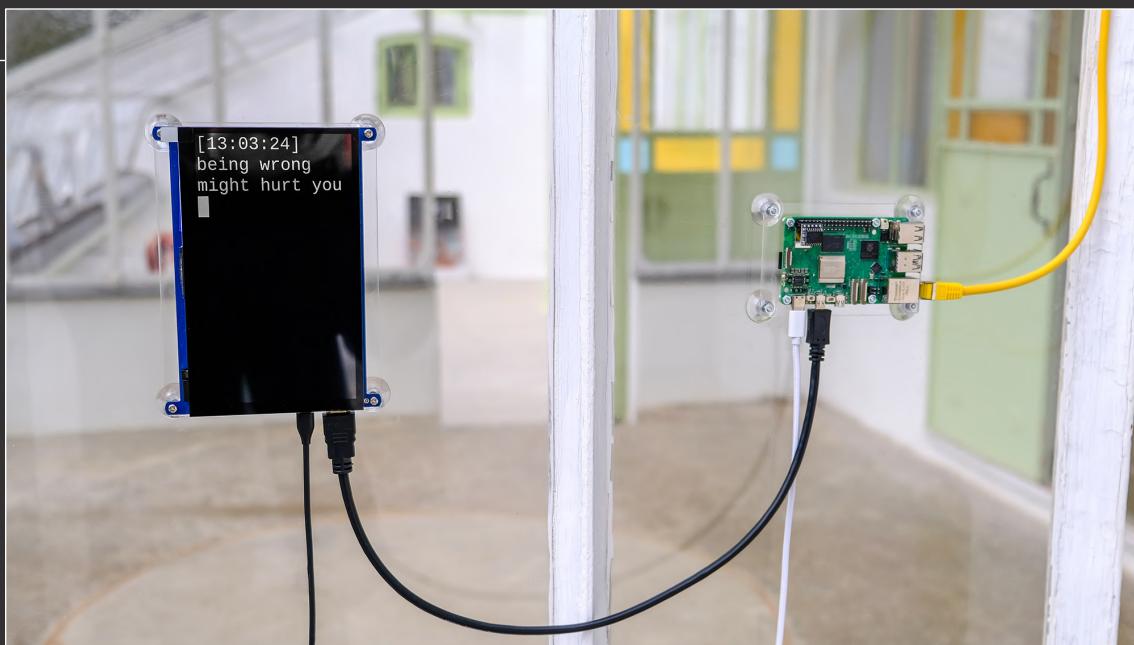
2025 | Sound Installation

Materials: Custom Software, RaspberryPi, Network Cable, Relays, Screens

Exhibited at Villa Waldberta, Munich | Germany

Every second, a quote is accessed and traded back and forth by two pairs of single-board computers, connected via unequal amounts of cable: 50m and 1m. Although synced in the beginning, the extra amount of cable causes nano-seconds of delay, forcing them to go in and out of sync over the course of several hours.

Presented in a glass house where temperatures and brightness made it impossible for the audience to comfortably look at the installation - it reflects the 'residual heat' and inhospitable conditions of modern data-centers.



Equi-Distant

2025 | Performance

Materials: Custom Software, Treadmill, Runner

Exhibited at NEBYULA, Munich | Germany

A race between a file-transfer and a runner, made for the opening of my solo-show ‘Equi-Distant’. At the start signal, a file was sent from the gallery to the nearby datacenter *EQUINIX MU3*, which specializes in equidistant trading. For the duration of the performance, the audience could then see, hear and smell a file being transferred via the runner and a custom-built network monitoring interface.

[Find a short excerpt of documentation here](#)



Transferred Data

624.29MB / 2104MB
4994.308105 MBIT/S

29.728%

Run Distance

298.30M / 1000M
3.333 M/S

29.830%



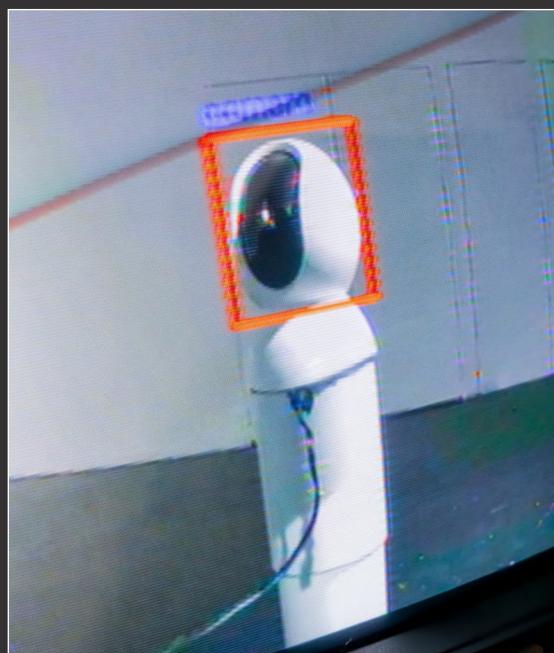
Camera Self-Surveillance

2024 | 8-channel Algorithmic Composition for IP Cameras

Materials: Surveillance Cameras, CRT-TVs, RaspberryPis

Exhibited at WORM, Rotterdam

There are thousands of surveillance-cameras in the Netherlands, all collecting what can be described as “behavioural surplus data”. Strangely, the cameras themselves are almost never represented in public datasets. **CS** is an experiment to fill that dark-spot by creating an object-recognition algorithm that recognises surveillance cameras and uses them to observe one another.



The Netherlands (350.3MB)

2024 | Data Sonification, Algorithmic Composition for Audio and Visual

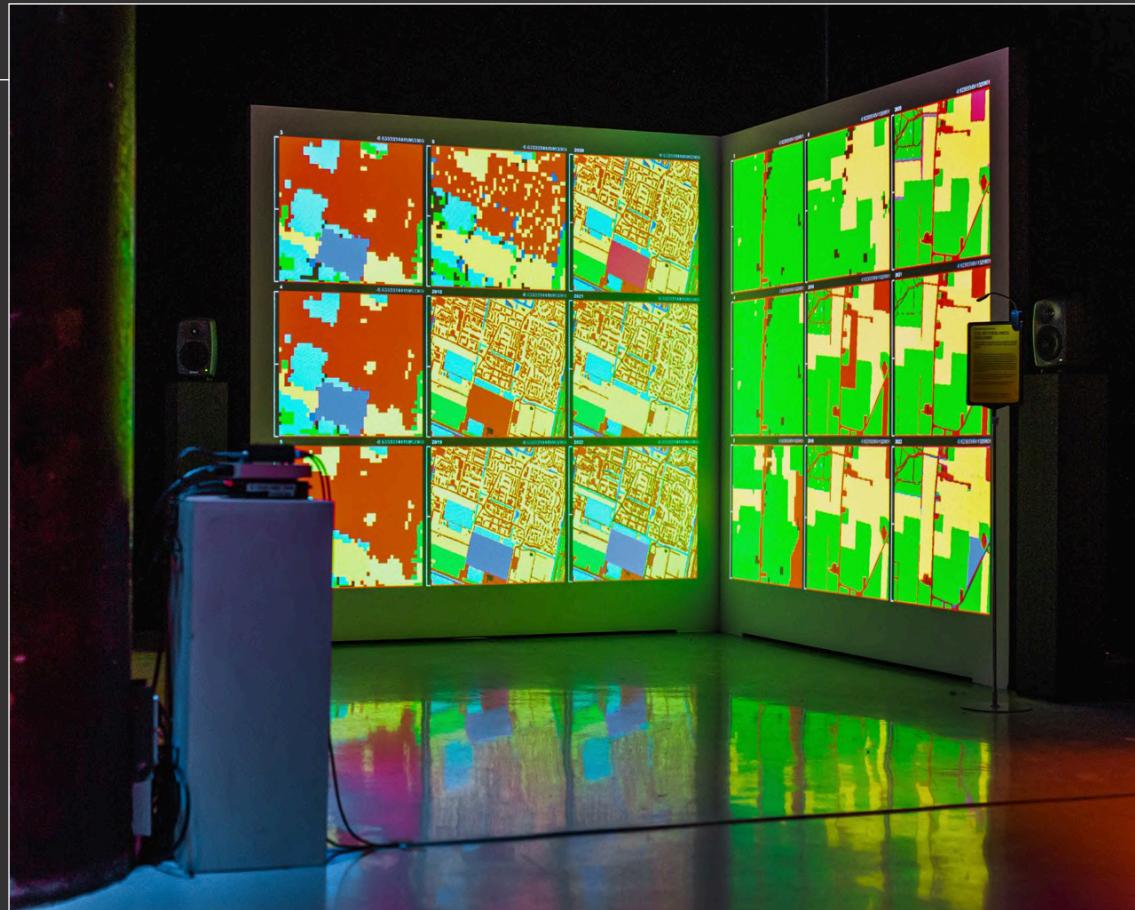
Materials: 6x3m projection surface, 3-ch sound, 2-ch visuals

Exhibited: V2, Rotterdam

Since 1986, the Netherlands has been divided into a map of 42 classes, ranging from “natural grass lands” and “urban built-up areas” to “potatoes”, with the help of remote-sensing technology and geospatial reference-data. Developed to aid in predicting future development of The Netherlands, this highly complex system comes with the inherent limitations of computation and systems-thinking, as it compresses the entirety of the country into a data-packet of just 350,3MB (LGN2022).

The installation The Netherlands (350,3MB) is a translation of exactly these data-packets of recent decades into sound, with the goal of creating an abstract, sonic representation of the country.

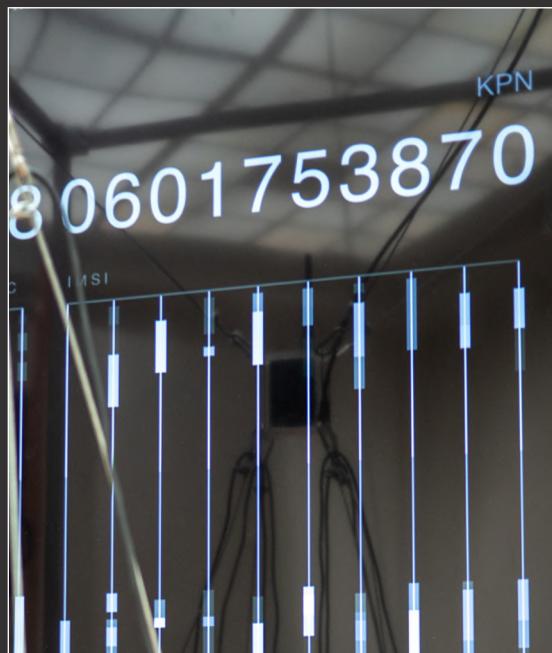
Find AV-Excerpt [here](#).



Somewhere Around 900MHz

2023 | Data Sonification, Algorithmic Composition for Audio and Visual
Materials: Steel frame, 70" screen, headphones, RaspberryPi, SDR, macMini
Exhibiting at Nieuwe Instituut, Rotterdam

This repurposed surveillance-tool generates a sound-composition in real time, by collecting and decrypting sensitive information from nearby phones. *Find a short excerpt [here](#).*



SA900_Port

2024 | Data Sonification, Algorithmic Composition for Audio and Visual

Materials: Panel-Antennas, 7" screen, headphones, RaspberryPi, SDR

Exhibited at *Dutch Design Week*, Eindhoven

Portable cell-phone tower that collects data from nearby phones and turns sensitive data into a sound-composition. Continuation of research-project “Somewhere Around 900MHz”.

Listen to a live-recording [here](#).



CELL-PHONE

2023 | Interactive AV Installation

Materials: Unreal Engine, 7" screen, stereo-sound, Antenna

Exhibited at Uncloud Festival, Utrecht

Site-specific installation made during short residency for Uncloud Festival in the isolation cells of the former psychiatric prison.

[Link to Video-Documentation](#)



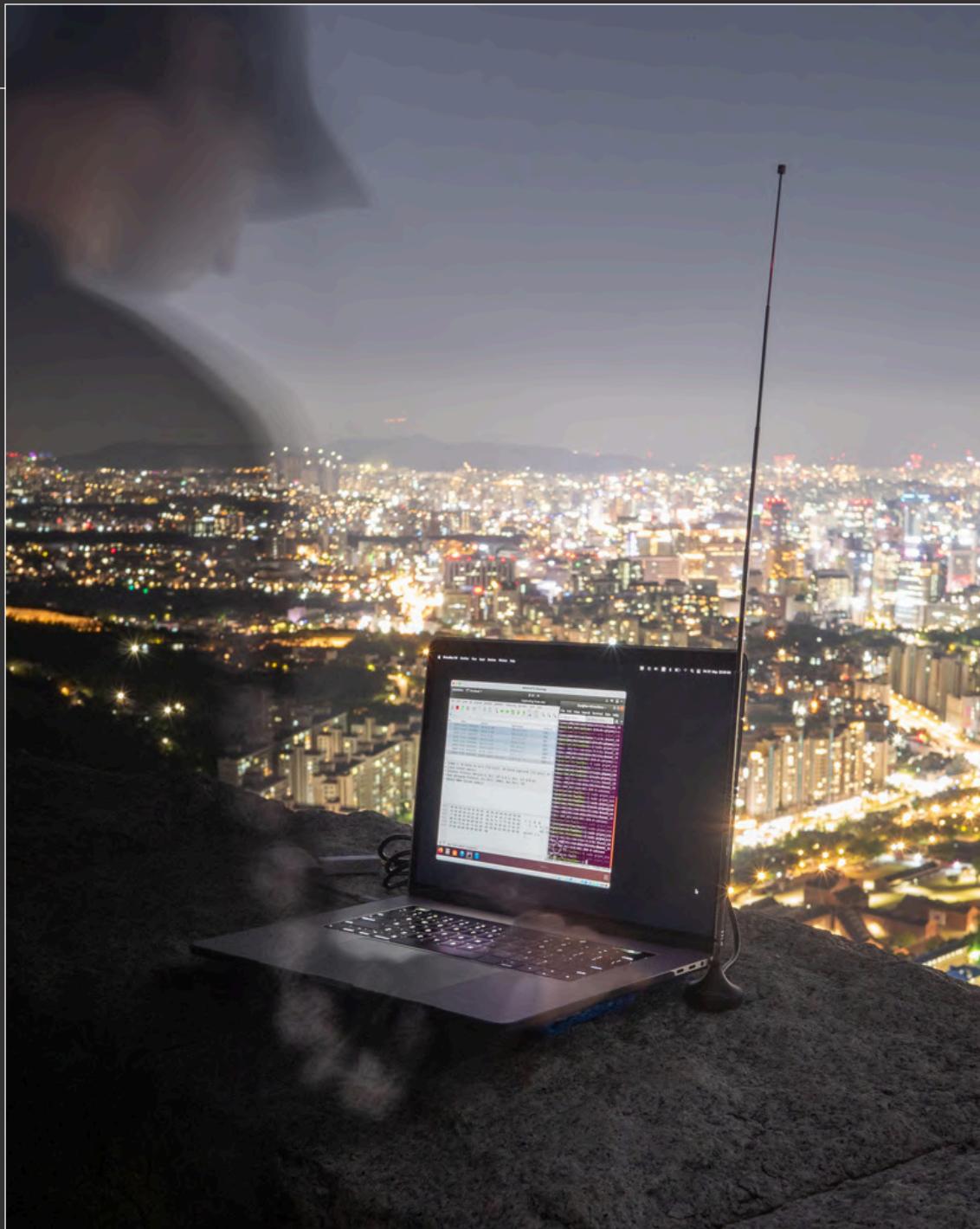
Amateur Engagement in Advanced Technoscience

2022 | Live-Coding-Performance, Research Project

Documentation from Seoul, South Korea

Research on adapting the practise of exploiting network vulnerabilities.

[Find an excerpt from a live performance here](#)



Two Kids at the Adult's Table

2022 | Furniture Design and Audio/Visual-Performance

17:30 mins, 2-channel AV

Materials: Custom Furniture, live-coding, TouchDesigner

Documentation from **Ten to Ten**, Royal Academy of Arts Den Haag



D¹R-30-F

2021 | Algorithmic Score, Kinetic Installation

Materials: Doors, stepper-motor, transducer, arduinos

Exhibited at *Plan-B Art Festival, Iceland*

Composition for automated doors based on rule 30 of elementary cellular automata.

Video Documentation from Sketch



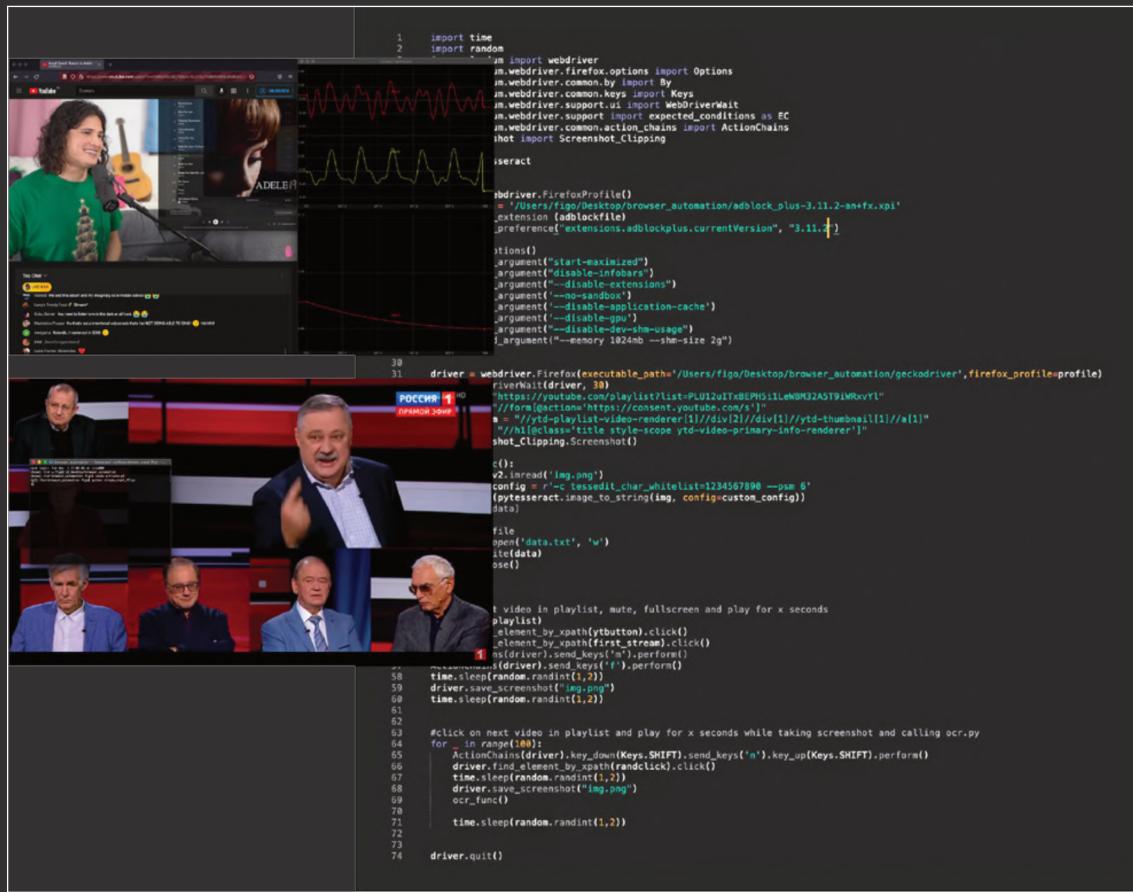
```
for _ in range(100)
```

2021 | AV-Performance

Materials: Custom automation software, PureData, 2-channel audio

Python-script that runs through current YouTube livestreams, analyses the visual output and interprets it as audio data.

Find short video documentation here



No Growth Without Erosion

2021 | Autodestructive Research, assisting Aldo Brinckhoff

Role: Programmer, Composer

Researching on automated erosion by melting extruded polystyrene (XPS) in an highly precise automated setup. By changing distance, path and movement speed of the burner we examined different results.

[Link to video documentation](#)



Invisibility of Non-Location

2022 | Algorithmic Composition

Materials: Custom speakers, 2-channel sound

Documentation from [\[inside the geofence\]](#) Vienna, Austria

Algorithmic sound-piece composed for custom speakers and audio-walk of Silke Riis and Silja Beck at University for Applied Arts Vienna.

[Video Documentation](#)



Imaginary Lines

2022 | Digital Sculpture for Augmented Reality
Documentation from AR Exhibition in Tokyo, Japan

