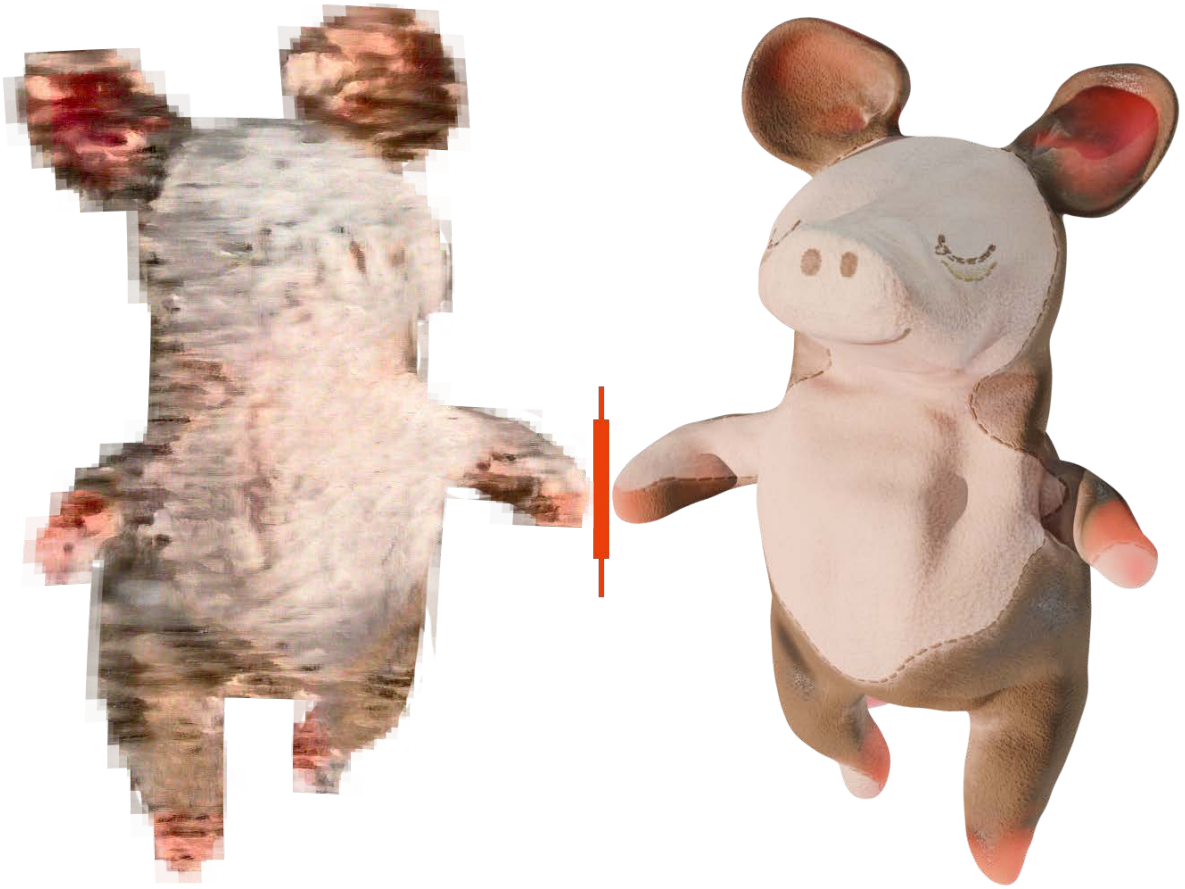


Zhu Clever

Zhu Clever is an art group formed by ***Zhengyang*** and ***Zhengzhou Huang***, the twin artists, along with a digital *Pig*, their creative agent. Once a shared plushie for years, the *Pig*, now 3D modeled, acts in many of their works.

About

Zhengzhou & Zhengyang Huang

We are Zhengyang and Zhengzhou Huang, a twin artist duo from Chongqing, China and currently based in Los Angeles. Our work reimagines our relationship with the ever-evolving digital technologies. Using mediums such as animation, game, web, and physical objects, we create stories, interactive applications, speculative designs, and alternative technologies. Essentially, our work joins the never-ending effort to create interfaces and channels that bridge the emerging digital phenomena with tangible experiences. Recently, we are developing a project about being a twin with AI, with research on simulations and data representations in machine intelligence.

We have shown our most recent works at AT HOME, IKEA Residency Closing Show, Fermynwoods Contemporary Art, Society for Literature, Science and the Arts at University of Michigan, Plicnik Space Initiative and University of California, Los Angeles.

2023

Fire

Medium: Plywood, Laser Etching,
3D Demo made with Unity3D, Website

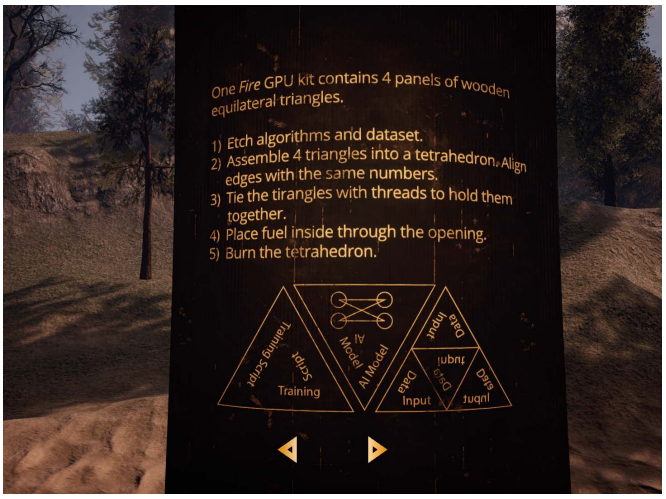
Game Download: zhuclever.itch.io/fire
Web: 0buo.github.io/fire/
Video Documentation: vimeo.com/987453552

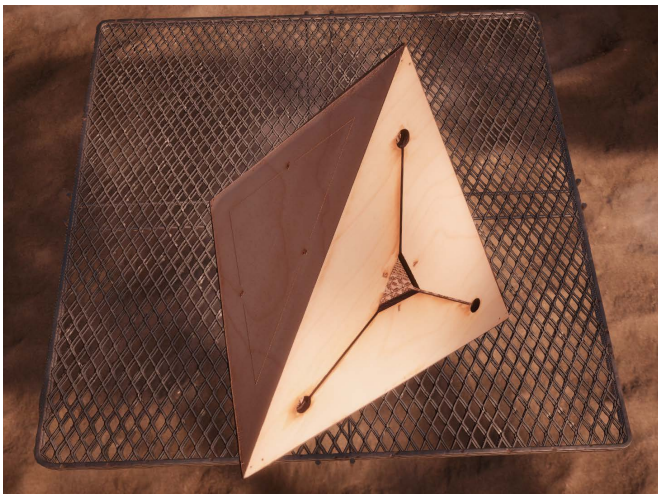
Fire is a speculative project introducing a GPU kit made of wood for AI training, in a future where mineral-based GPUs are scarce. *Fire* GPU kit consists of wood panel sets etched with AI model algorithms and training data. *Fire* imposes a unique constraint on GPU technology and AI training: each kit can only 'burn' once, with the amount of wood burned determining the data the AI can learn. This project emphasizes the need for meticulous data usage in extensive AI training.

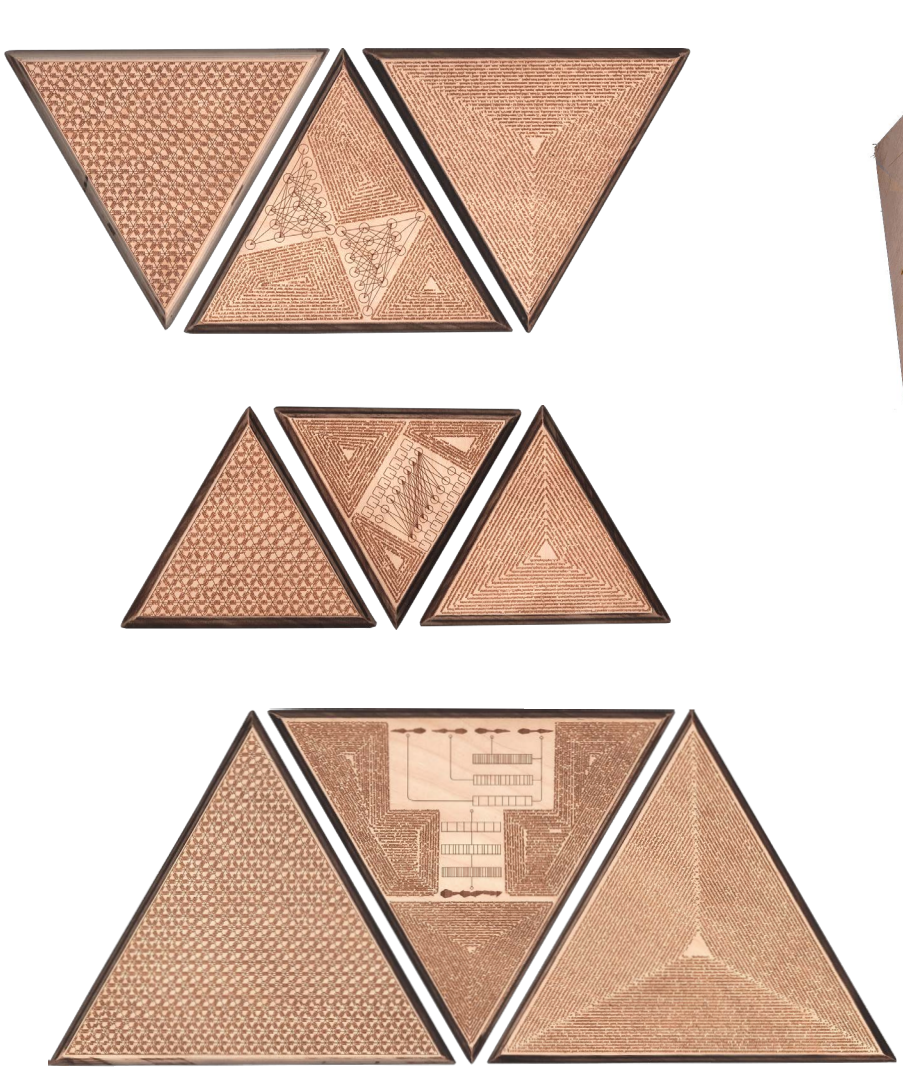
Fire is presented as physical objects, an interactive demo and a product website to showcase the whole process of using *Fire* GPU kits.

Screenshots of Interactive 3D Demo

Screenshots of Interactive 3D Demo







Physical Fire GPU Sets

2021

Web: nuobh.github.io/
Video Documentation:
vimeo.com/987448315

Water

Medium: Website, Performance, Illustrations,
Water, Aluminum Foil, Metal Mesh, Electronics

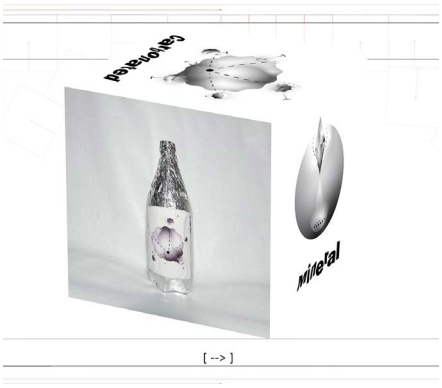
Water is a speculative project, designing an alternate data storing and sharing method using water. This project is inspired by the homeopathic practice of "Water Memory" in which people researched and believed that water carries and transmits information, including emotion. Our project imagines an unstable data-structure existing within the volatile liquid molecules. *Water* introduces an ambiguous and physical interface with data, exploring new relationships with one's own data.

This project consists of performance videos, participant involvement, and a documentation website. WWe documented the entire performance on how to transfer data from a regular USB drive into water and how we prevented data contamination from noise signals during the process.

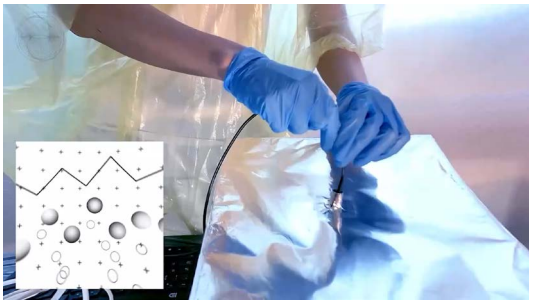
Here are the 5 steps of data transfer:

(1) Clean equipment

(2) Select types of water as a storage base for data transfer



(3) Set up equipment including double faraday cages, wire clips, a container, and a USB drive



(4) Transfer data to water with the help electromagnetic radiation

(5) Store data-infused water in the freezer

Participants' Documentation

We invited participants to transfer their data into water. They sent us their data on USB drives, and after completing all five steps, we returned the final frozen water to them by mail.

2021

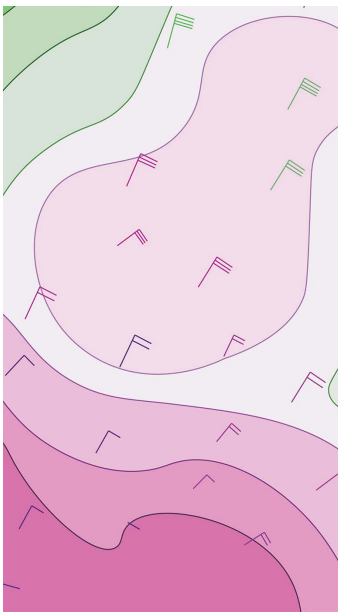
Video Trailer:
vimeo.com/1007550469

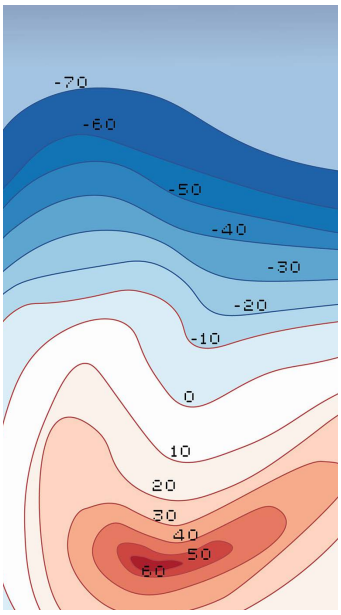
Air

Medium: VR video

Air is a speculative project that envisions a future where planetary-scale computation functions like a weather system. In this world, a smart home device called Air predicts the daily influence of this vast computational network on individuals. It does this by analyzing virtual data movements streaming in and out of users, data centers, and AI. By merging insights from atmosphere-like data patterns, Air forecasts potential disruptions, or "storms," in this data-driven environment.

This work is a VR video portraying three days in the life of a person interacting with Air. The person's daily data features are unrecognizable to himself, and only through the aid of Air, he gets a grasp of an upcoming data storm.





2023

Video Work:
Digital Twin - Freshly Produced
vimeo.com/913218049
GAN Animation
shorturl.at/5mXUn

Digital Twin Series

Initial Experimentation & Character Design

Digital Twin is a project series we initiated in 2023. It started with designing a digital piglet character modeled after a childhood pig plushie we shared growing up as twins. The pig, personified as a "third twin", explores the parallels between the twinning process experienced by ourselves and the learning process of AI adapting to users. AI, not just a neural network model, encompasses the entire process from human data-annotation to preference-centered algorithms. Through our research, we began to see the user-AI relationship as a cycle of reincarnation: users generate data, which is analyzed by AI to offer personalized predictions, bringing the AI closer to users. It can be said that:

Data, Context, Feedback
⇓⇓⇓
Users ≈ AI

In a series of projects, the pig will enact and embody this user-AI / user-data twinning relationship. Ultimately, Digital Twin explores the interconnectedness of individual moments and public memories, pooled from datasets, analyzed by AI, and personalized by us.

Character Design

2024

Game Download:
zhuclever.itch.io/secondhand-life
Video Documentation:
vimeo.com/987512213

Secondhand Life

Digital Twin Series

Medium: Unity Game Engine, ChatGPT-4, Stable Diffusion, Text-to-Speech

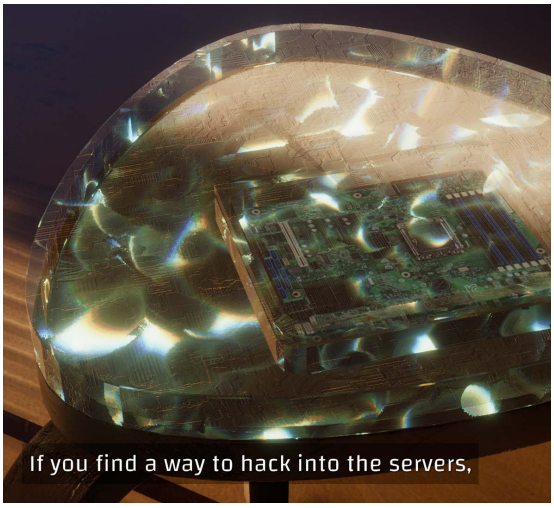
Secondhand Life is a game in collaboration with Wendy W Fok's research "Live With Data," where data servers are integrated into furniture, bringing people closer to data.

Secondhand Life imagines a future where this furniture is sold in secondhand markets. In the game, you play as a secondhand furniture collector who acquires these pieces, hacks into the data servers, and lives vicariously through the former owner's data. This game is also installed physically with an interactive projection, where in-game data objects appear as digital furniture in the real room.

Secondhand Life explores not just acquiring secondhand furniture but also secondhand data. Essentially we ask:

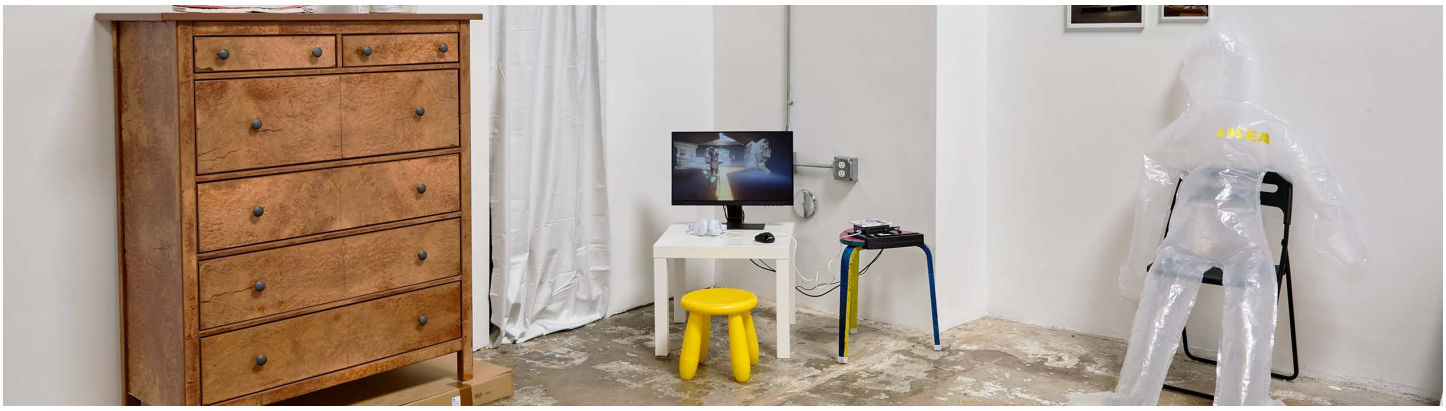
- How much do we truly own our data?
- Is physical access to our data important?
- To what degree can we own others' data?
- How much does data shape our life stories and vice versa?

It looks different to you, doesn't it?


If you find a way to hack into the servers,

- Restart -
I ride the monorail a lot,

Installation Photos



2024

Video Excerpt:
vimeo.com/950614446

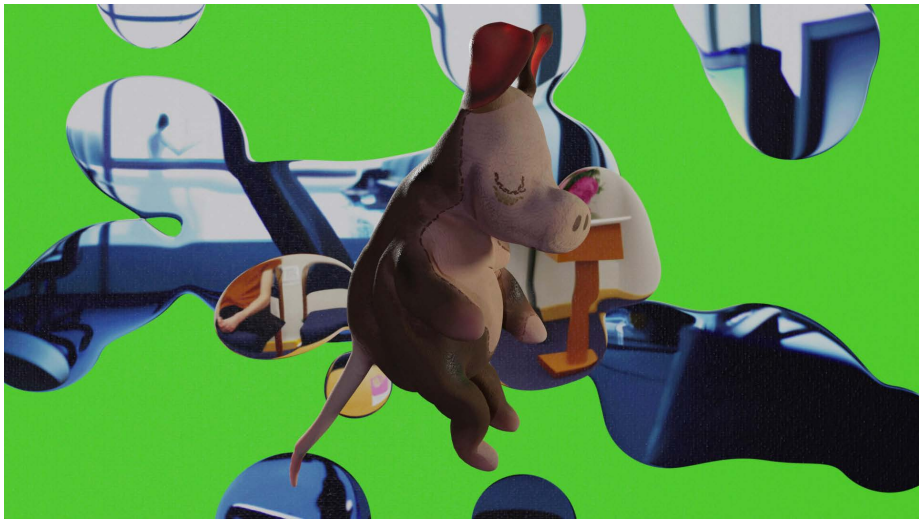
Our Agent

Digital Twin Series

Medium: 3D Animation

Our Agent is a *work-in-progress* project created during China's COVID lockdown, amidst online/offline protests and our personal dilemmas including visa sponsorship, familial expectations, career paths, romantic relationships and closeted identity. In this video project, a digital pig acts as a surrogate intelligent agent, experiencing life events on our behalf—such as lockdowns, career changes, artist fame, elopement, coming out, and ambivalent family gatherings.

Each event is AI-generated, drawn from its vast datasets. The video story presents the pig as a product designed to live certain moments for us through AI-generated scenarios. Ultimately, the digital pig becomes a stand-in for all of us, with our lives feeding into AI generative models.



Video Stills

2020

Video Documentation:
vimeo.com/913370819

Pigxell

Medium: Unity Game Engine

Pigxell is a combination of performance and online game, where players purchase digital furniture to decorate virtual spaces. Here, creativity knows no bounds as players curate their virtual abodes with a plethora of decor options. In a departure from conventional lifestyle games, Players must trade personal images of their body parts (eyes, nose, ears, mouth, hands, feet) with the seller "pigxell" to acquire corresponding furniture. *Pigxell* challenges players to re-examine the concept of ownership and privacy under a system designed for greedy data collection.