Grace Thompson

Human-Centered Designer

Design works 2022-2023

Resume

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(603) 727 8728

About

Human-Centered Designer with 5 years experience supporting cross-functional teams by quantifying user behaviors to deliver solutions for challenges on startup and large-scale products.

Education

UC Berkeley

Masters of Design

- Debates in Design Teaching Assistant
- Google x Haas Product Design Fellow

Dartmouth College

BA Experimental Psychology,

Human-Centered Design

- Design Thinking Teaching Assistant
- Product Manager, DALI Lab

Experience

Product Design Validation Engineer Intern

Apple Inc.

May 2023 - August 2023 • Cupertino, CA

Tested the performance and user experience of various hardware prototypes. Compiled, visualized, and communicated qualitative and quantitative research findings to cross-functional teams.

Freelance User Experience Designer

Unlocked Labs, Recover Athletics, Statewide Database (& more)

May 2020 - Present • Remote

Collaborate with startups to design digital products/features from user insights to artifacts of various levels of fidelity. Develop journey maps, user jobs, personas, wireframes and style guides to enhance user experience.

User Experience Researcher, Design System

PTC Inc.

August 2020 - August 2022 • Remote / Boston, MA

Advocated for customers of PTC's legacy software by creating user research artifacts to set the vision across teams for our complex transition from On-Premises software to SaaS. Developed and maintained online persona repository to democratize inclusive design. Facilitated group brainstorming to synthesize big-picture thinking into steps for the design of PTC's next-generation UI

Awards

Fellowship Grant: Equitable Product Design Challenge, supported by Google x UC Berkeley EGAL, 2023

Distinguished Scholar Award: UC Berkeley Master of Design merit scholarship, 2022

Design Challenge, 3rd place: NASA x Adobe Hackathon, 2021

Dartmouth College Rockefeller Grant: International Systems Dynamics Conference, 2018

Skills

Adobe suite
Figma
Unity
Prototyping
C#, Python
Journey Mapping
UX Research
Design Thinking
Equitable Design

Earlids

MDes Thesis Project

About: A solution for noise pollution that doesn’t mute the world. Instead, it replaces unpleasant noises with personalized, enjoyable sounds so wearers can remain aware of their surroundings.

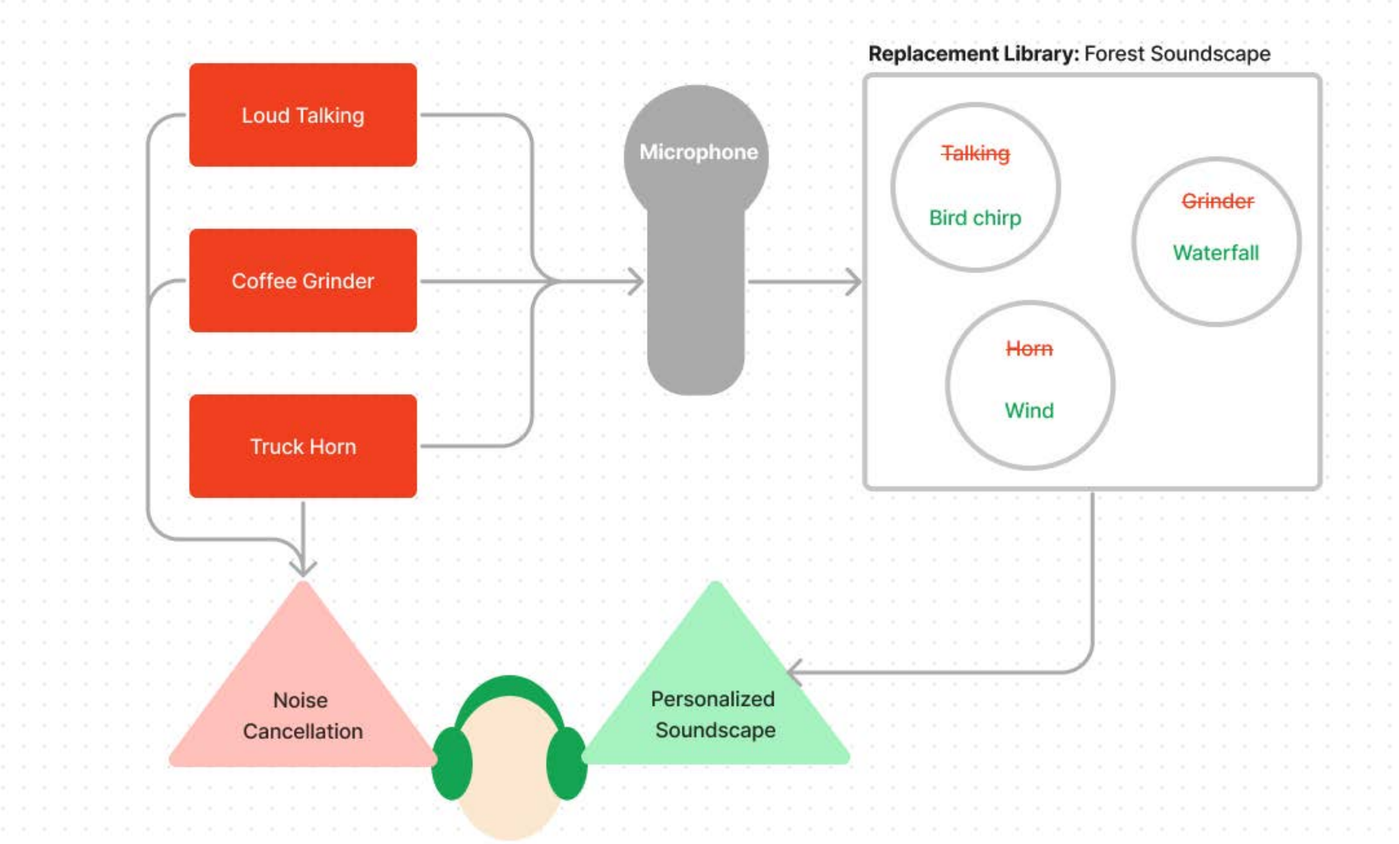
Time: 14 Weeks

Background

Noise pollution in urban areas like New York City significantly impacts human and wildlife health, causing issues ranging from hearing loss to mental health decline.

Despite global anti-noise pollution efforts, such as Paris's sound cameras and the EU's noise reduction targets, personal noise control remains a necessity. Current noise-canceling devices eliminate the ability to listen, presenting a gap in personal sound management.

The Earlids project addresses this by offering a way to replace unwanted noises with personalized soundscapes, combining health awareness with technological innovation in noise control.



Prototyping

Integrating MaxMSP with noise-canceling headphones afforded detection, muting, and replacement of environmental noises with selected soundscapes.

The focus was on testing various noise sources and pleasant sound libraries for effective sound remapping.

Challenges like accurately overlaying variable urban noises and ensuring user comfort with the over-ear design were addressed.

Testing

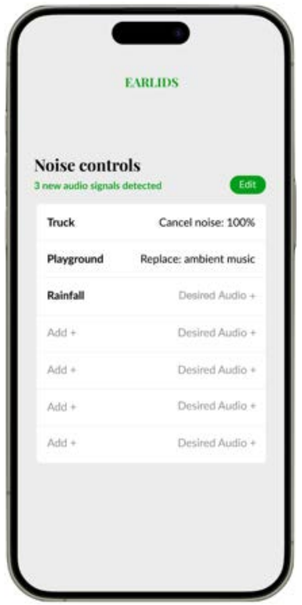
Testing was conducted in by playing common urban noises and enabling users to turn on remapping. I noted feedback on sound preferences, and the overall experience.

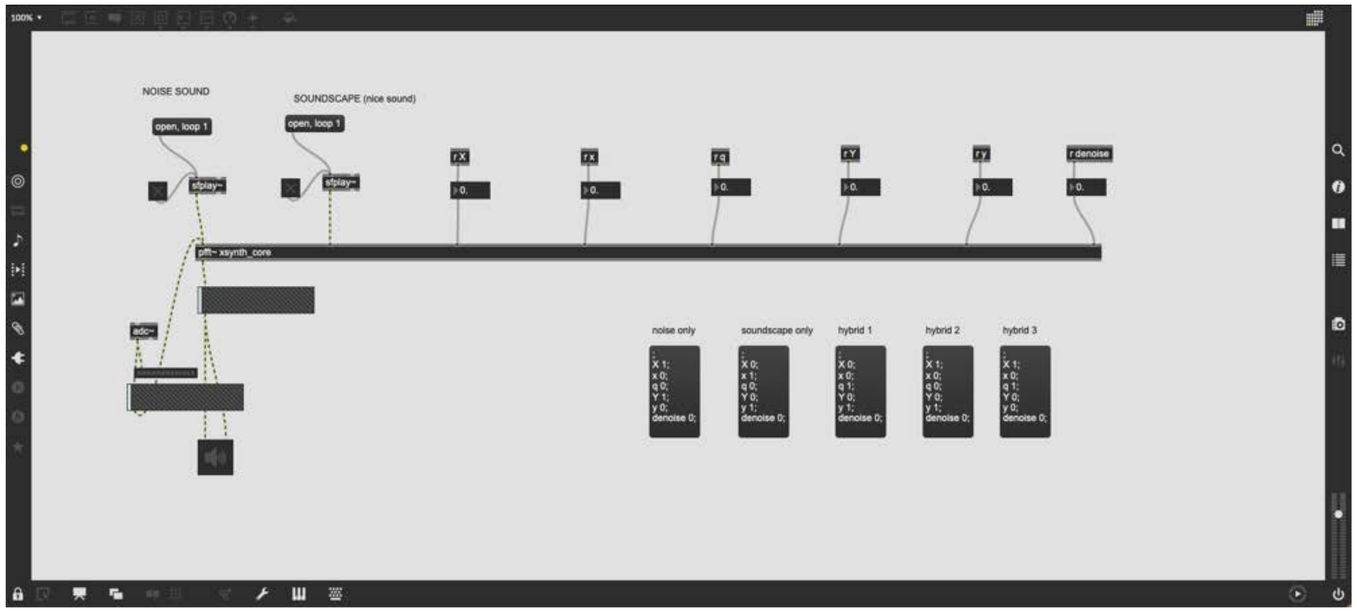
The main challenge encountered was ensuring quality sound remapping in different urban noise environments.

Final Product

Earlids function using MaxMSP software integrated with Bose QC45 noise-canceling headphones. The software employs algorithms to detect specific environmental sounds through a built-in microphone and replaces them with selected soundscapes from a pre-loaded library, offering diverse choices like nature sounds or music.

Users can select and change these soundscapes via a simple digital interface. The design also features color-changing earcups, allowing users to signal their listening status and interaction preference. This approach enables users to customize their auditory environment, replacing unwanted noises with preferred soundscapes.





Product Design Validation Intern

Apple Inc. | Cupertino, CA

About: Tested the performance and user experience of various hardware prototypes. Compiled, visualized, and communicated qualitative and quantitative research findings to cross-functional teams.

Time: 3.5 Months

Team: Product Design Validation

Tools used:

Matlab

JMP

Motion Capture

User Feedback

& others*

Products:

*Project details are under NDA

Edible Soft Robotics

About: A material study to develop a sustainable alternative to Silicon, which is commonly used for soft robotics

Time: 6-weeks

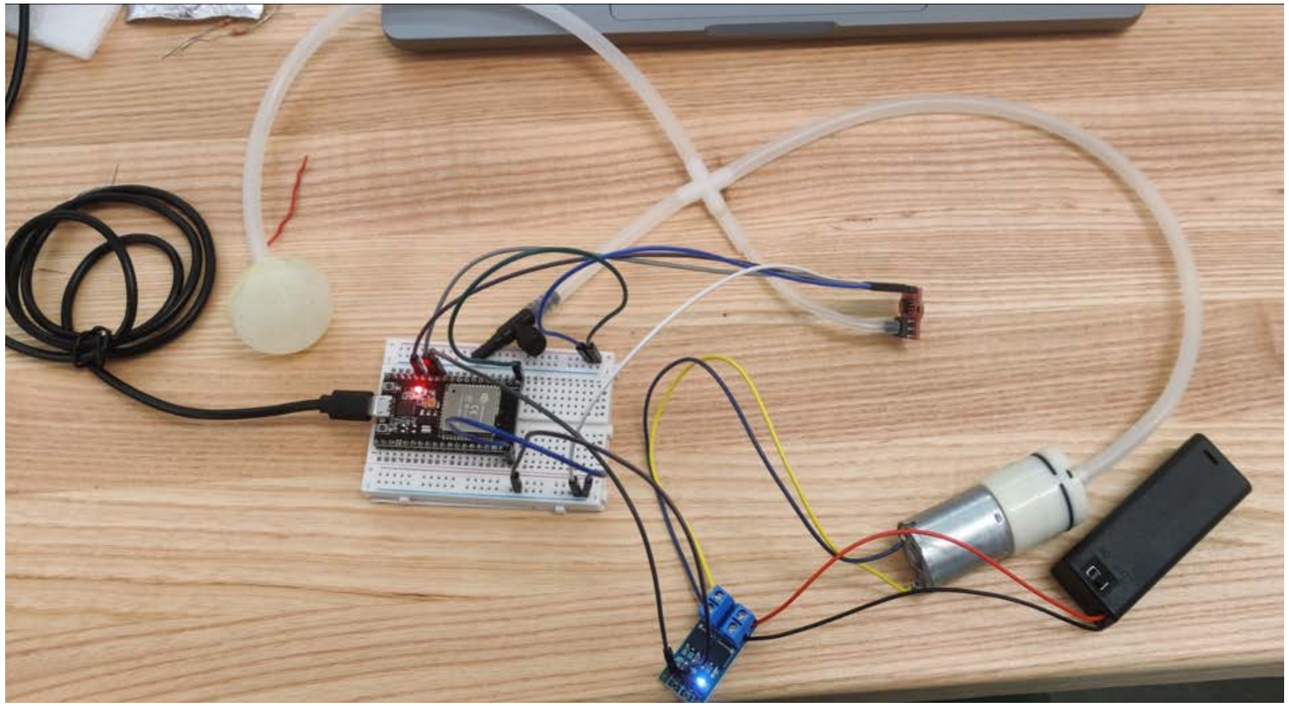
Team size: 3 people

Contributions:

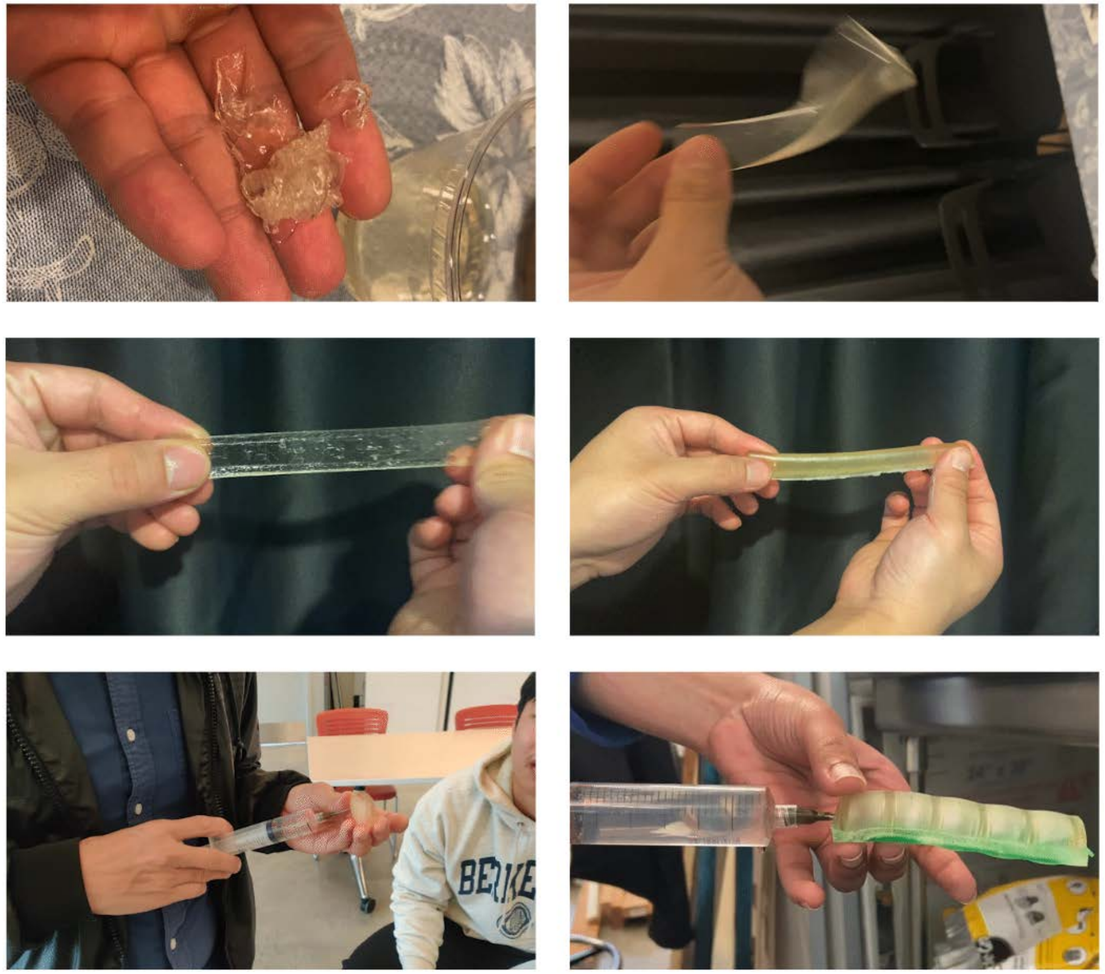
Design concept, mold development (CAD model & 3D printing), material testing, presentation (laser cutting)

Background

In learning about soft robotics, we noticed similarities between the texture of silicon molds and gelatin. This inspired our team to develop an edible alternative material to expand the possible use cases of soft robotics. We explored how our gelatin-based molds could be used to enhance dining experiences and support medical procedures and rehab.



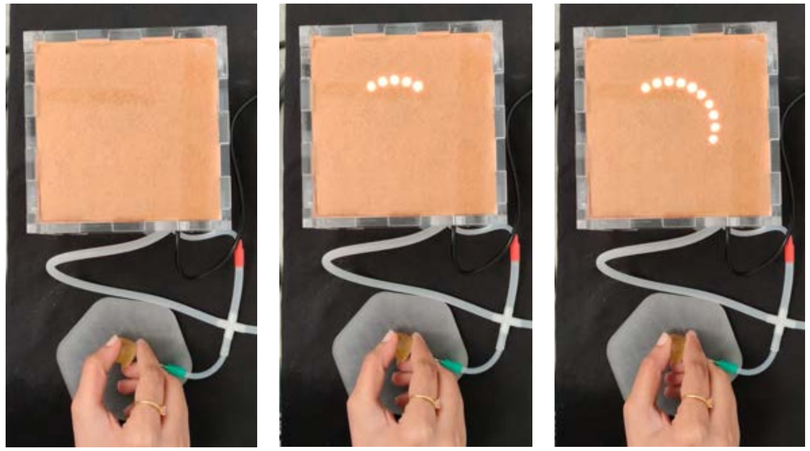
Prototyping



Experimenting with ratios of gelatin: glycerin: hot water

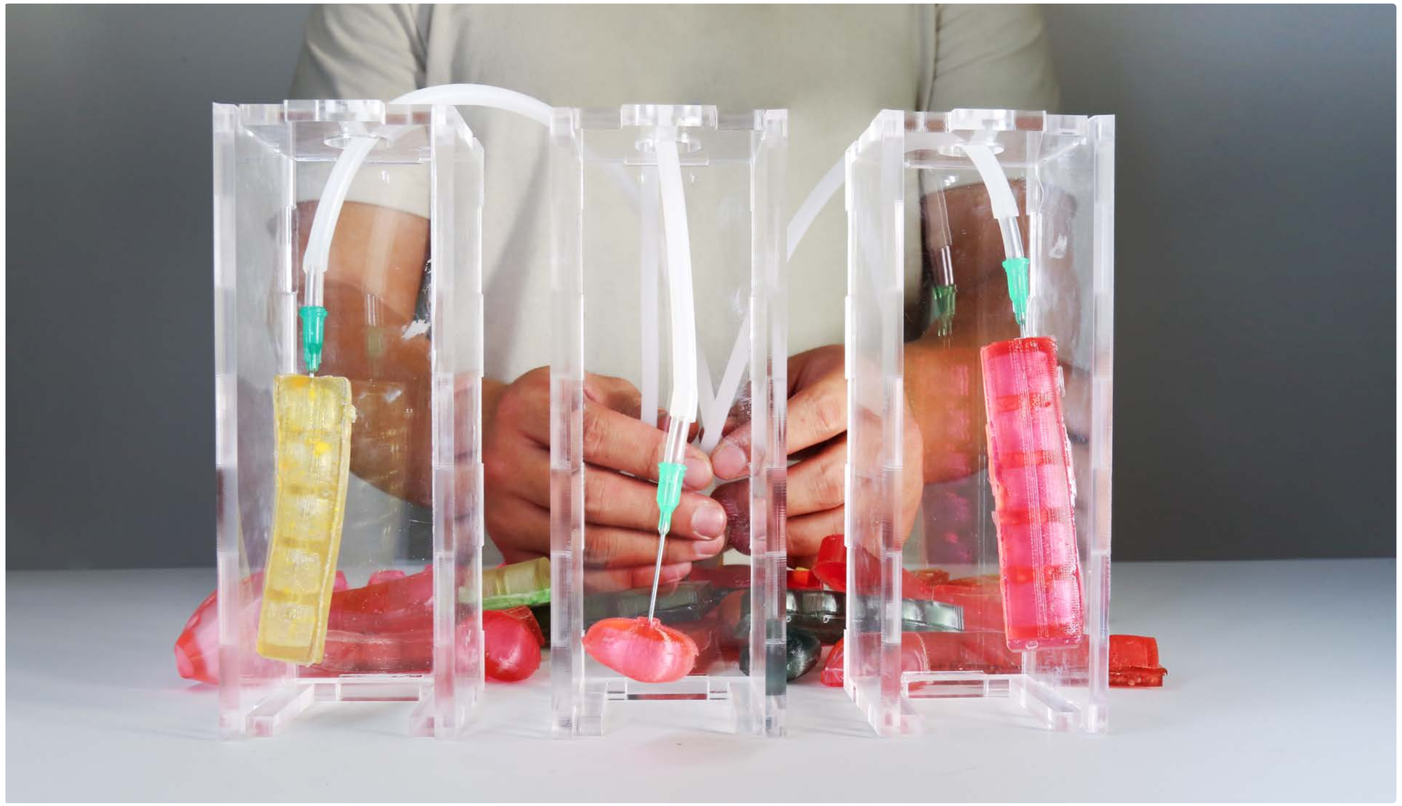
We mixed various ratios of gelatin powder with glycerin and 80° C water. The mixture was then poured into a mold and rested to cure. Placing the mixture in the fridge accelerated curing.

Once we determined which ratio was most resilient to stretch and pressure, we developed a series of prototypes to demonstrate the material's versatility.



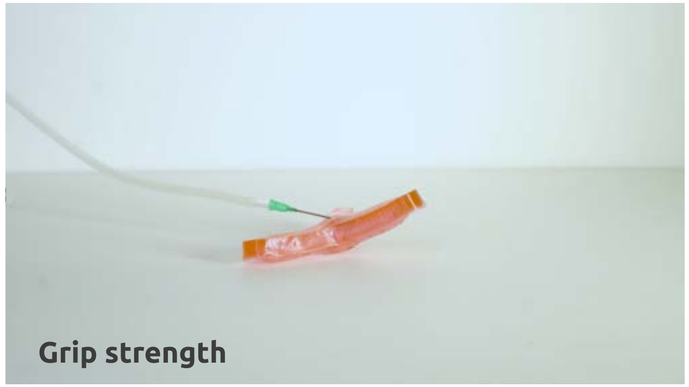
Jaw strength pressure sensor

Final prototypes



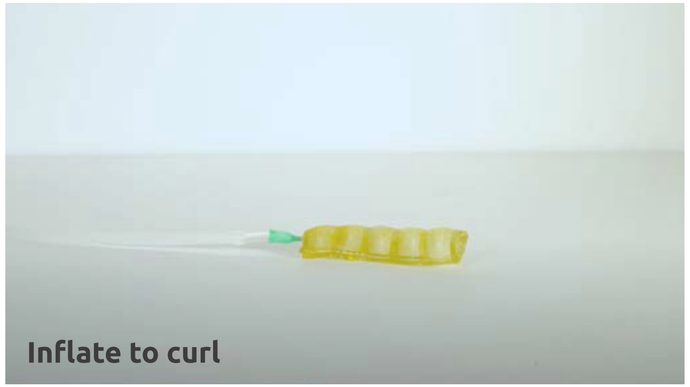
Dissolvable

Plastic alternative



Grip strength

Expand & contract



Inflate to curl

SoFar

About: For long distance relationships: sitting on a platform causes the others to move, signifying presence

Time: 6-weeks

Team size: 5 people

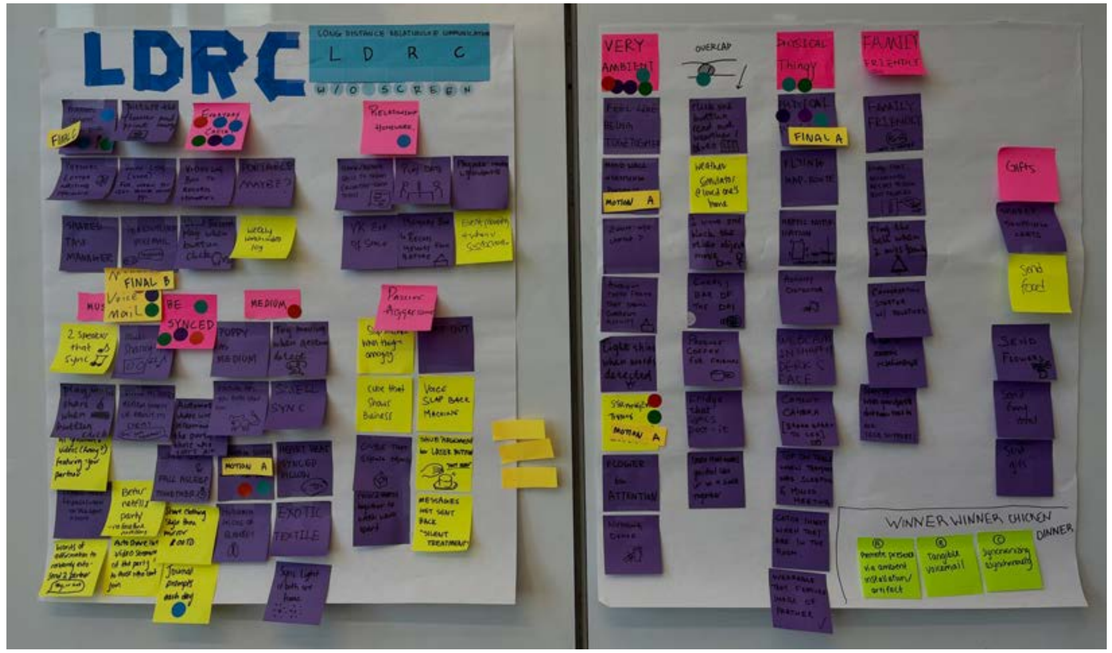
Contributions:

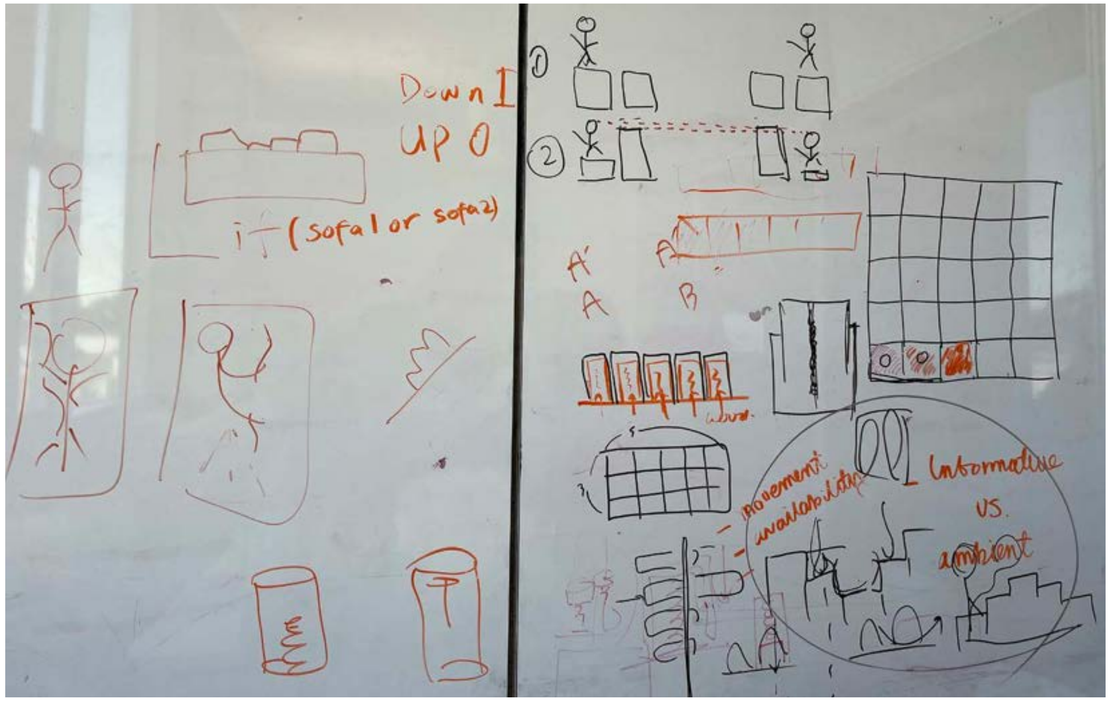
Design concept, fabrication (cutting, building, painting), testing, presentation

The Challenge

Long distance relationships are common; four out of five Sofar group members were in long distance relationships during the time of this project.

Frustrated by the constant screentime required to maintain our long distance relationships, we were inspired to reimagine remote human interaction without screens.





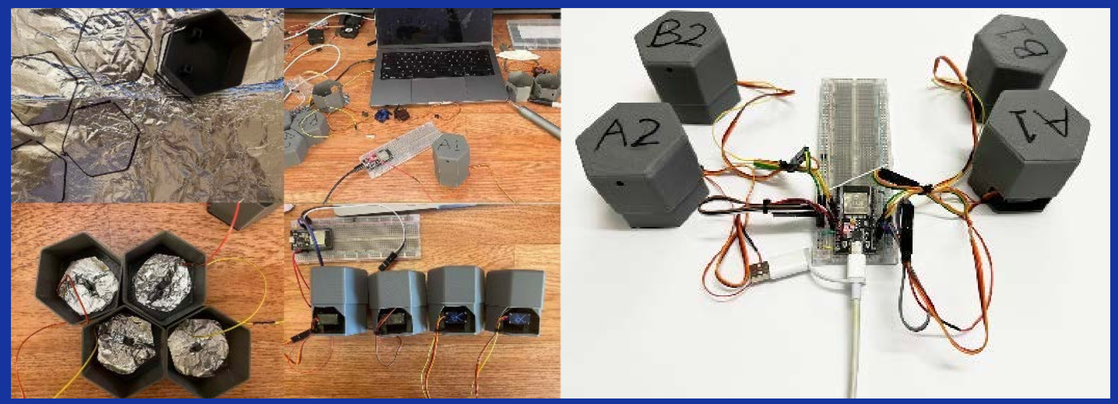
How might we create remote physical presence?

Prototyping

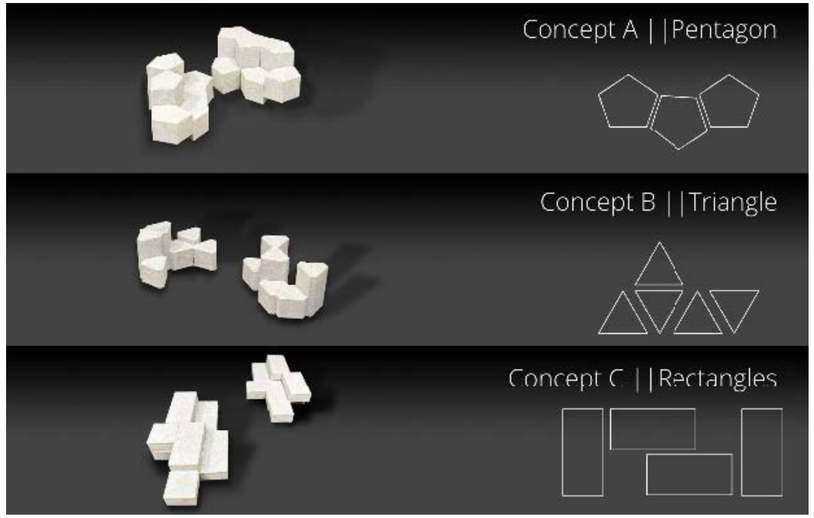
We prototyped several approaches for conveying remote presence and settled on the following interaction:

When one partner sits on the sofa, the other partner's sofa platform will rise in the identical location, and vice versa.

We imagined this interaction would make it feel like the user was sitting next to their partner.



Form & Aesthetic



We explored a range of shapes for the seat platforms.

We found inspiration from the Bauhaus aesthetic because of its history building products using bold primary colors and plywood.

Building

We cut, primed, sanded and painted the plywood to create 16 boxes that assembled into 8 modular seats.

The top boxes were designed to slide onto the bottom boxes, however, after assembling the first box, we realized we had overcorrected from the previous prototype and had made the top box too narrow. Fortunately, we were able to sand the inner box edges to salvage the project!