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Education

Rhode Island School of Design: Industrial Design

BFA 2025

Technical Skills

- Rhino 3D
- 3D printing
- Adobe AI, PS, AE, PR, ID
- Fusion & Solidworks
- Rapid Prototyping
- Keyshot
- Sketching

Work Experience

2025 CAD Lab Monitor at RISD

FEB-JUNE

Operating and maintaining 3D printers, laser cutters, and standard printers to help fellow students and faculty materialize their digital designs.

Time & Resource management: During finals week, managing the bandwidth of each machine and running at maximum efficiency was necessary to fulfill all requests.

2025- Product Design Intern Rozeva

2026

SEP-JAN

Designing to the satisfaction a variety of clients through researching competitors, sketching proposals, and CADing a wide range of products from medical devices to phone accessories.

Key Demonstrations: Delivered several satisfactory designs for discerning clients when full time members struggled. Accepted proposals include a digital radiographer, an ultra-compact selfie stick, a set of children's toothbrushes, and more.

Outside the Box Thinking & Patience: taking the time to sit with the uncomfortable problems in order to create novel solutions. Patience and tenacity was necessary to complete projects.

Communication: Learned how to best gauge the needs of clients through frequently meeting in person and online, as well as observing the Design Director, with decades of experience, communicate with the client and the rest of the team

Teaching & Guidance: teaching other members of the team on sketching and form building.



01

SOMA | Portable Imaging

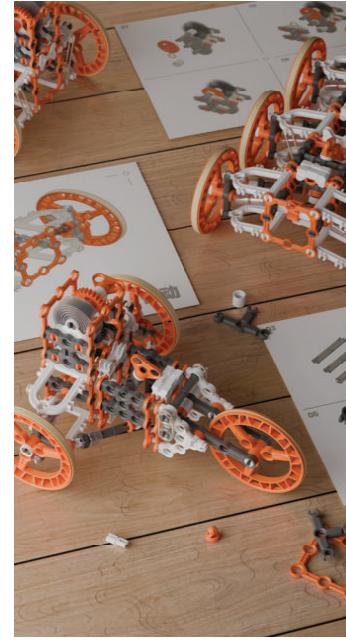
Rozeva 2025 (Professional)



02

Fu | Breathing

Individual 2025



03

ROVER | Construction Toy

Individual 2025



04

Kat.E | Desk Companion

RISD 2024 (Academic)



05

Shelle | Cultural Care

Rozeva 2025 (Professional)

SOMA

Friendly Digital Radiographer

A visualization for an ultra-portable digital radiographer (X-ray machine) for a client. This class of products excels in quick response to human or animal injuries. Consequently, The philosophy behind SOMA is to maximize lightness and user/patient friendliness.

- **Timeframe:** 4 Weeks
- **Role:** Product Visualization at Rozeva (Internship)
- **Date:** 2025-2026





Compact Imaging

Compared to its cousins found in hospitals, SOMA is much smaller. With a 150 cm x 150 cm imaging bed, it is designed for imaging broken or fractured limbs on humans and pets.





In the Field

With the neck folded, SOMA can be present where others cannot. Alongside its affordability, SOMA can be made available to school sports, off-roading events, pets in remote areas, and other emergencies.





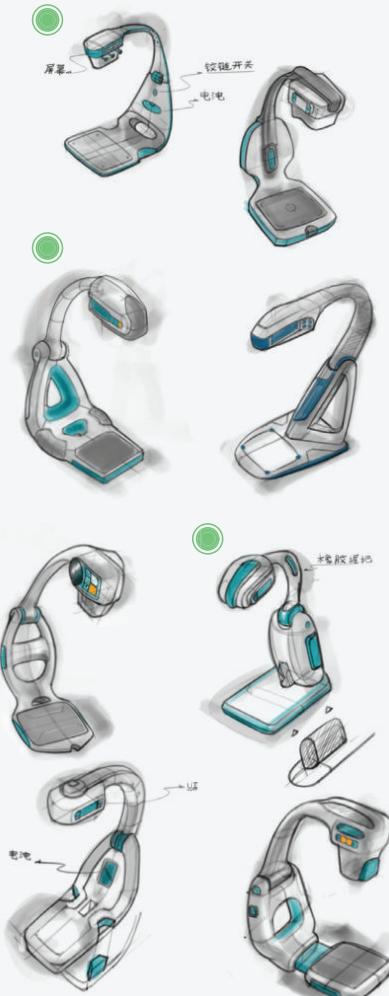
Mounting & Attachment

Though designed for portability, SOMA can be mounted on fixed external hardware via a mounting bed. This allows it to be used in a more stationary role.



Initial 2D Visualizations

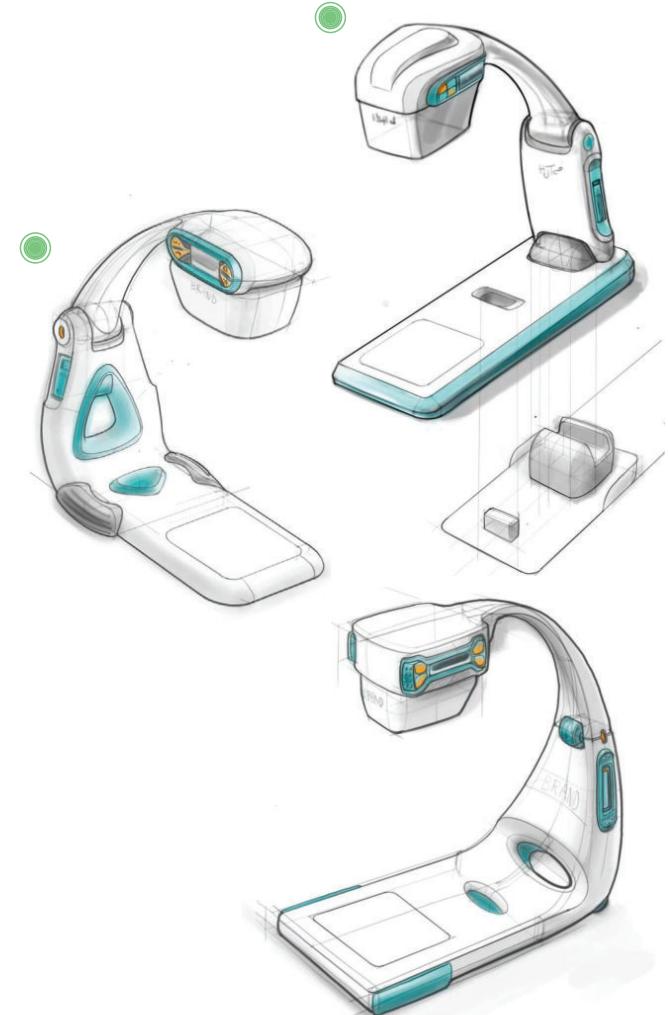
1. Thumbnails



2. Rejected Directions



3. Go Ahead for 3D



Too regular and angular, visually indistinct

Initial 3D Visualizations







Key Challenges

The unconventional “C” shape of the device mixed with a desire for a rounded form lends itself to overly organic and floppy forms.

The solution was to balance out the organic form with some hard, conventional geometry. This helps ground SOMA as a precision medical device whilst maintaining a warm, inviting presence.

What were you proud of?

The quality and fit of the 2D and 3D visualizations was praised in the studio and by the client. The proportions between the different components are well executed.

Key Learnings

Constraints such as the descriptive words in the “2D conceptual” phase can maintain focus on projects with relatively few visual constraints such as this.

In the future, the 3D rendering & lighting can be improved to further realism. AI would also be incorporated into the early visualization stages.



FU

Analog Breathing Companion

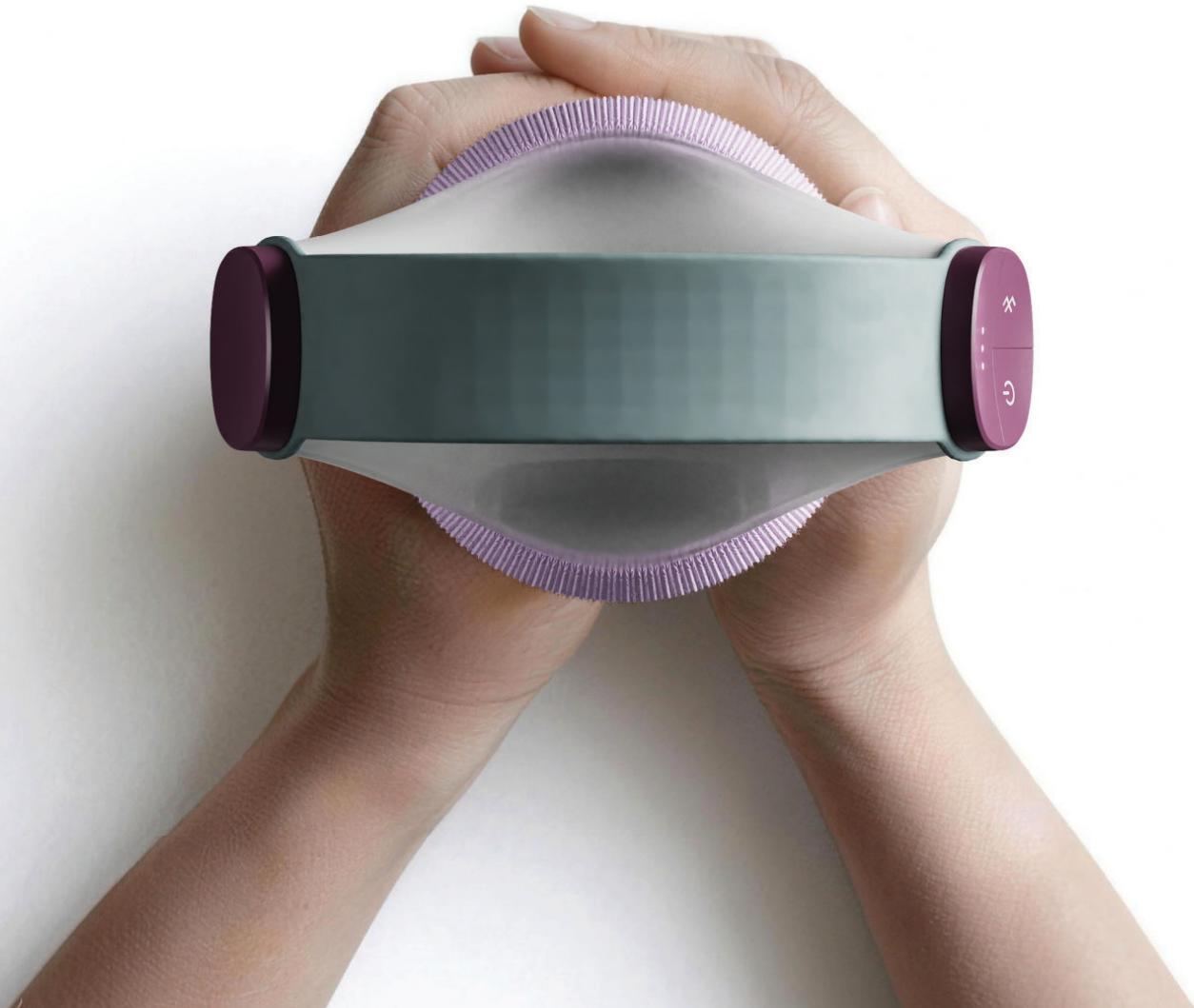
Designed to combat burnout, Fu is a mechanical device that mimics the motion of breathing. By holding onto and breathing along with the device, Fu helps the user perform effective breathing exercises that help regulate stress and anxiety.

- **Timeframe:** 4 Weeks
- **Role:** Academic Project at RISD, then Personal Project
- **Date:** Student Project 2024



What is Fu?

Fu uses its mechanism to simulate breathing, which can serve as a companion and guide to regulate stress and anxiety. Fu breathes in a rhythmic way and reacts to the user's heart rate dynamically.





Internal Mechanism

The motor oscillates and drives two arms out, pushing and pulling the fabric and foam outer layer, creating a realistic and comforting experience.



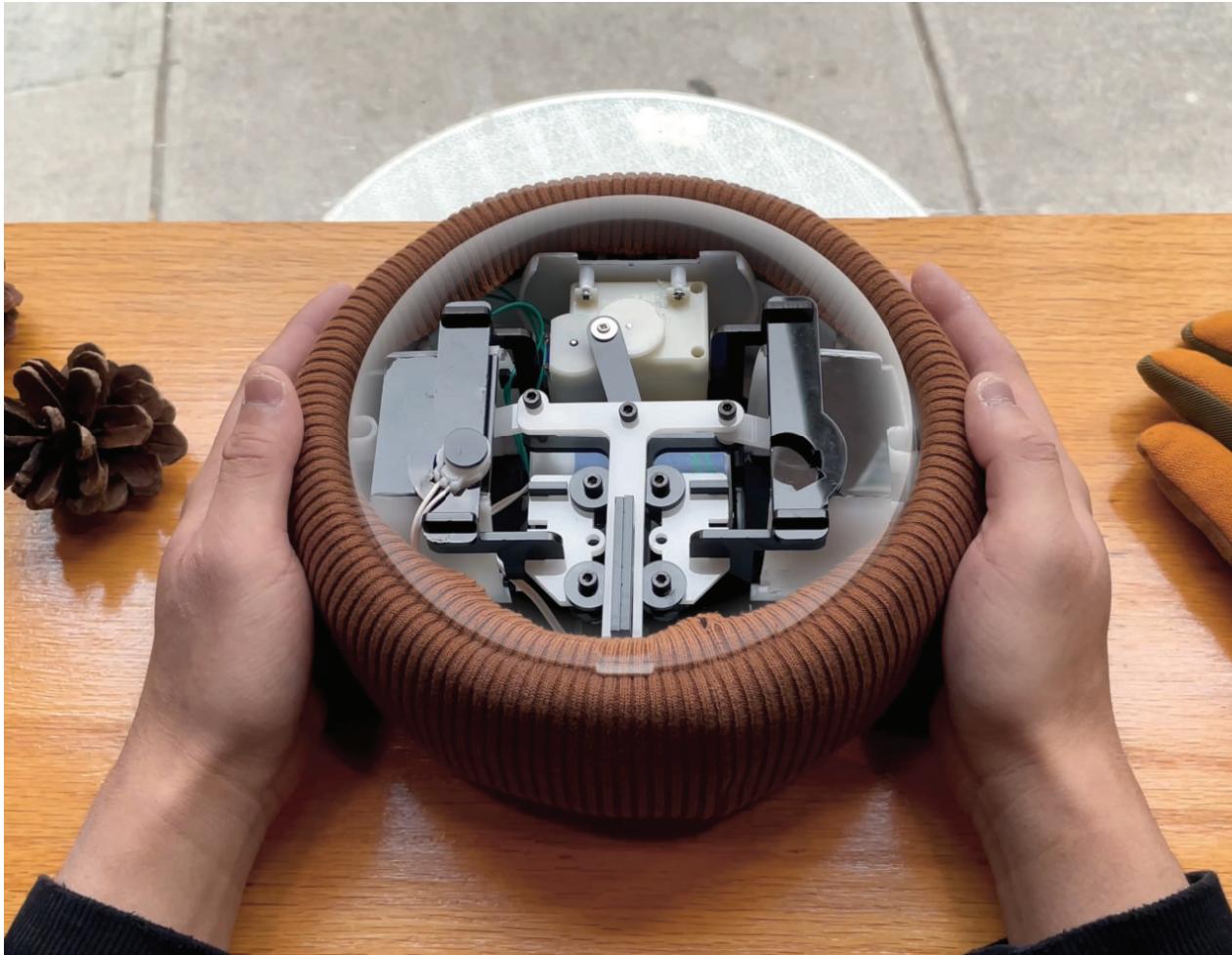
User Control

Optional Bluetooth connectivity allows the user to connect the device to their smartphones and help the device to breath in a way that best suit's the user's meditation practice.



Works Like Model

Fu's mechanical viability was tested with a fully functional works-like prototype. The prototype was made in a week, and featured a 3D printed shell, acrylic laser cut internal mechanisms, existing motors from a toy, and a ribbed fabric & foam outer covering.



(Below) An earlier iteration of Fu with an avatar character.



Research & Ideation

Creative ideas are more useful with the structure offered by communicating with the people who's lives the designer is trying to understand. Fu's design was altered greatly through user feedback gathered through in person interviews and hands-on tests.

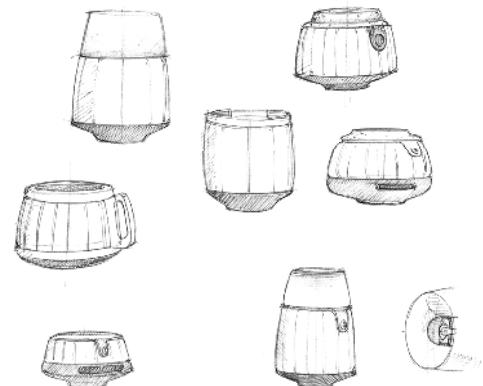
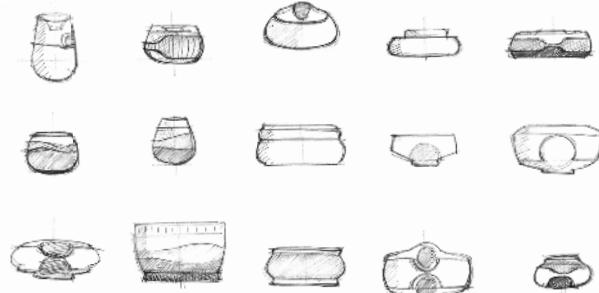
Interviews at the CIC in Providence, Rhode Island helped develop a picture of how people experience and handle workplace stress during work, as well as how they perceive certain forms to be appropriate or otherwise.

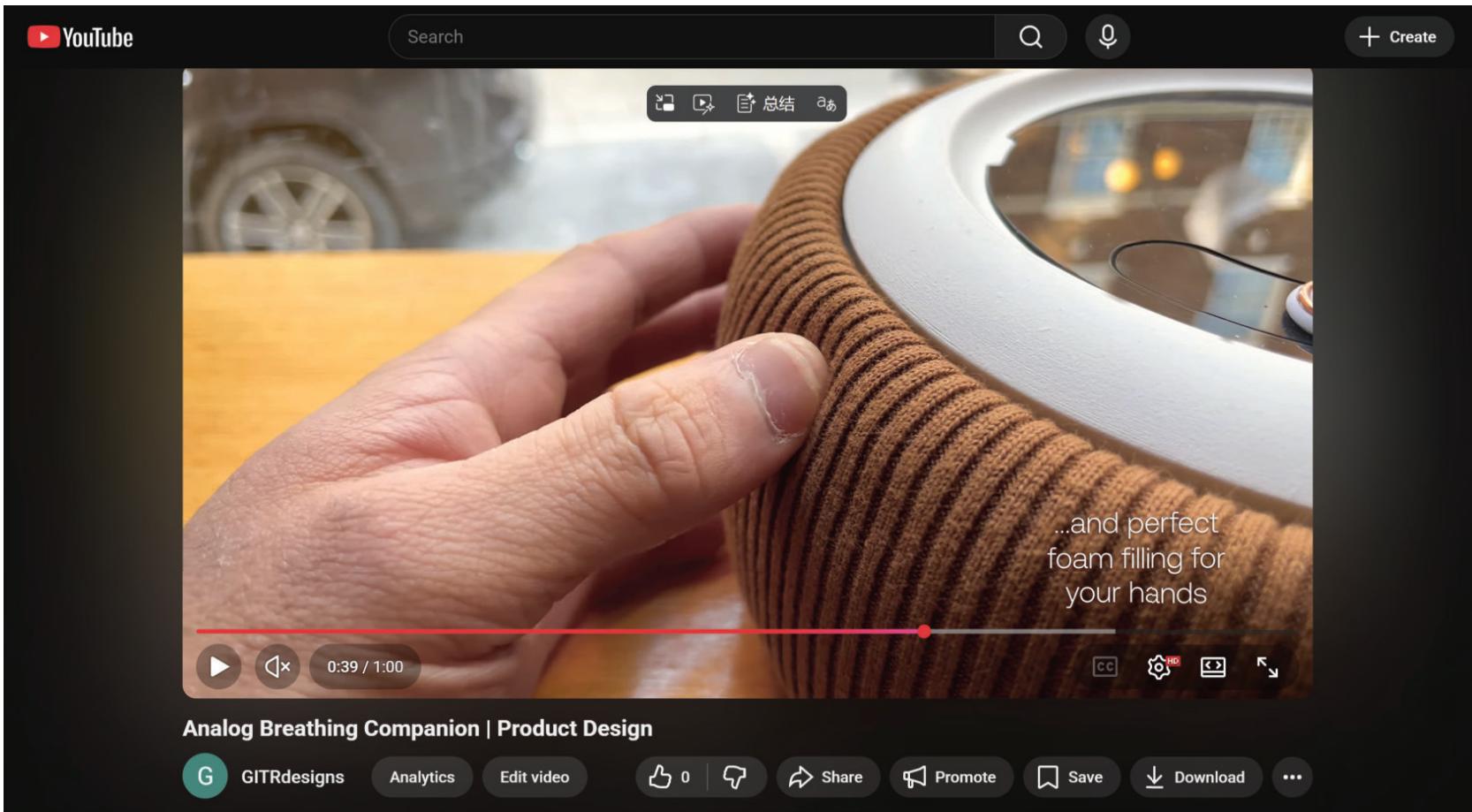


(Below) an early prototype featuring a bag that was rhythmically pumped to simulate breathing. Participants were asked to get hands-on.



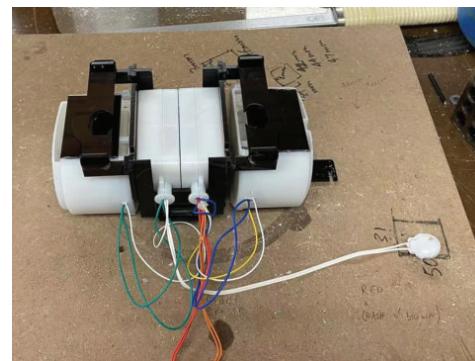
Sketches & Ideation



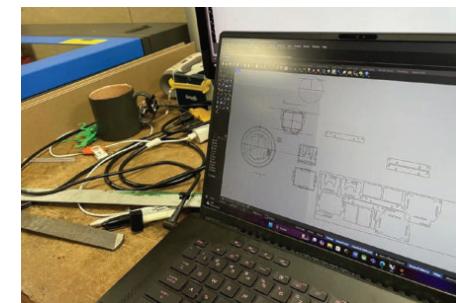


Full Demo Video

<https://www.youtube.com/watch?v=nI9hJLu0RNY>



(Above) two pistons are mounted in acrylic blocks facing outwards. An On/Off button is on the right.

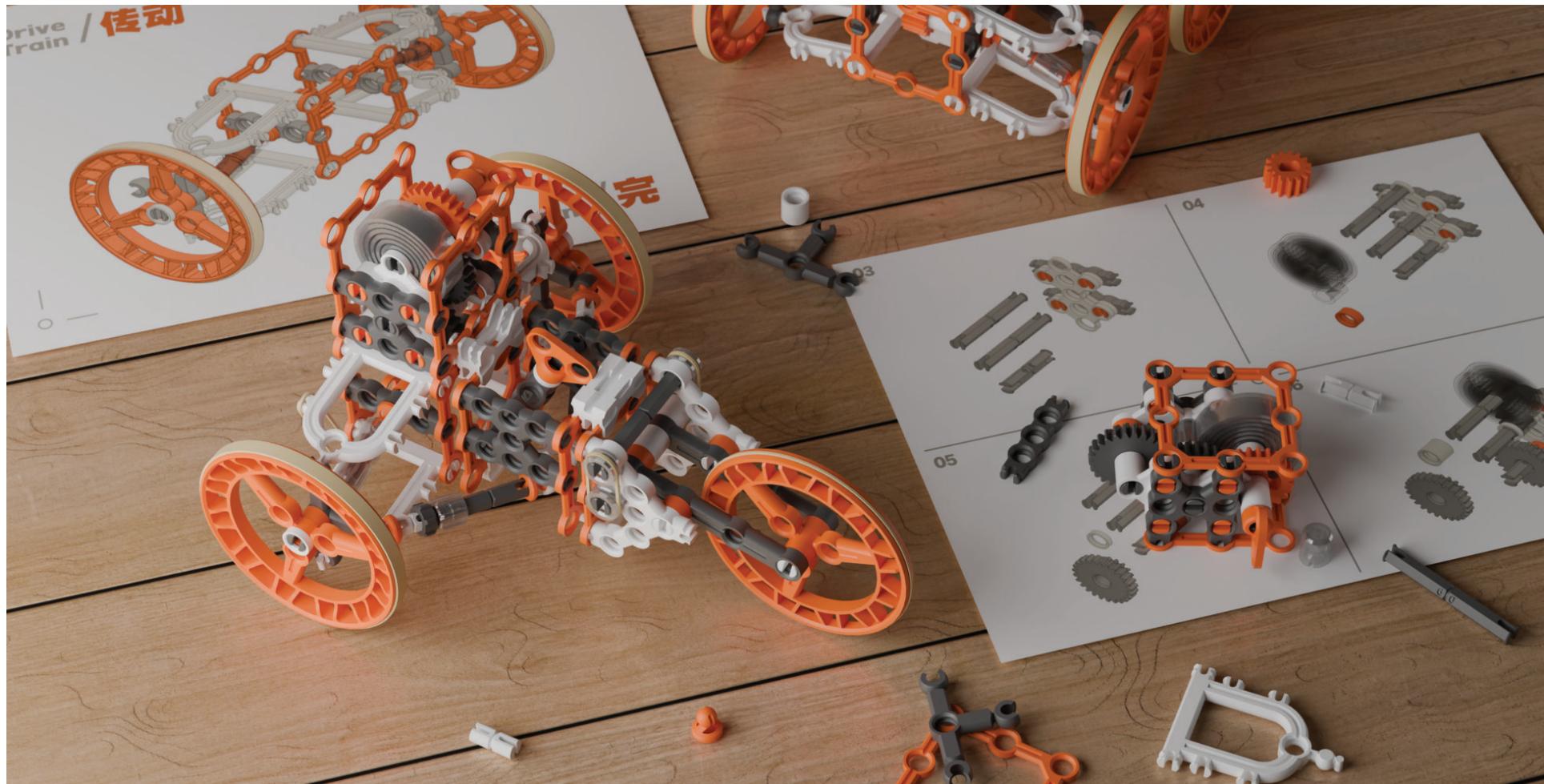


(Above) internal mechanism being designed next to laser cutter.

Physical Modeling

Producing a “works like” and “looks like” model worthy of a public demo within 4 weeks wasn’t straightforward. Fortunately, 3D printed and laser cut mock ups can quickly reveal flaws in both the exterior and interior mechanisms. Trial and error and adapting on the go was the only way this could be made.

The consistent modifying and tinkering is also what I am most proud of.

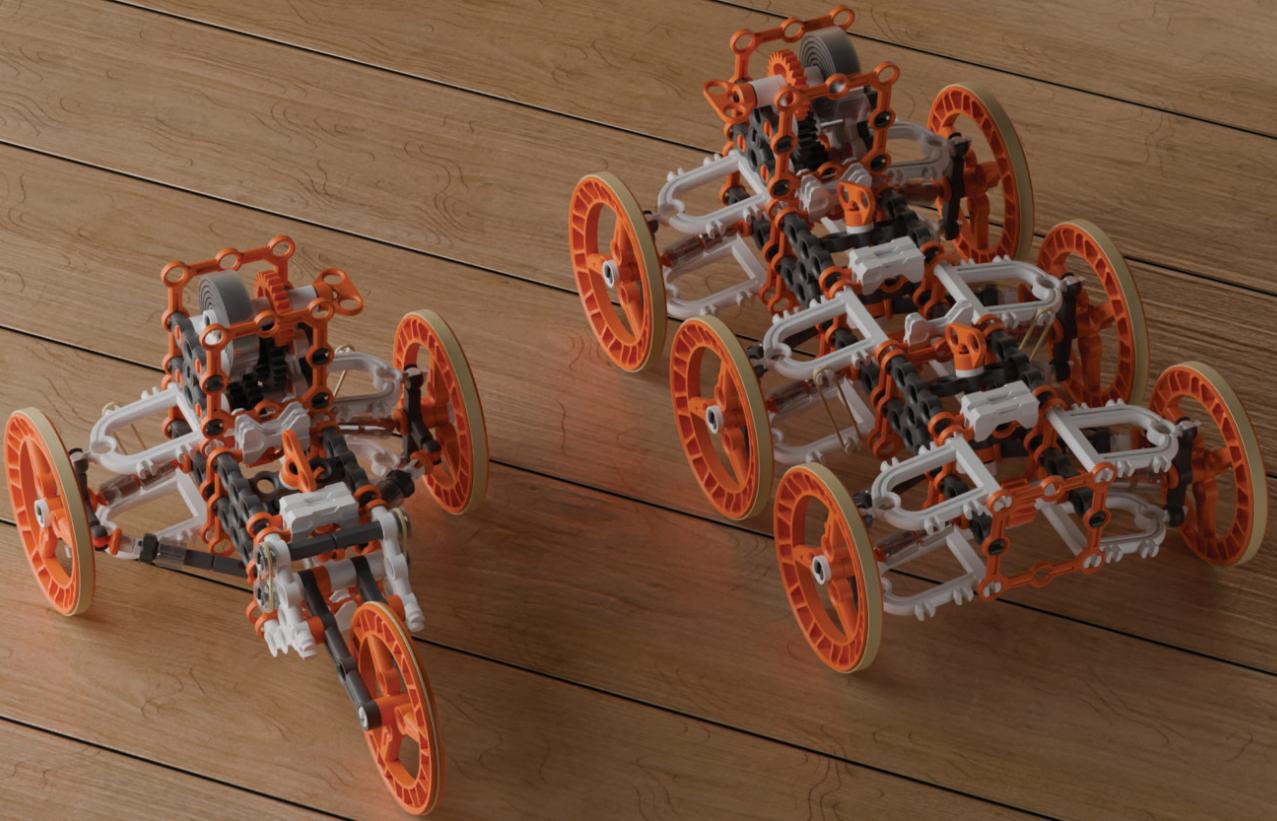


ROVER

- 3 Weeks
- Individual Project
- [MakerWorld Link](#)

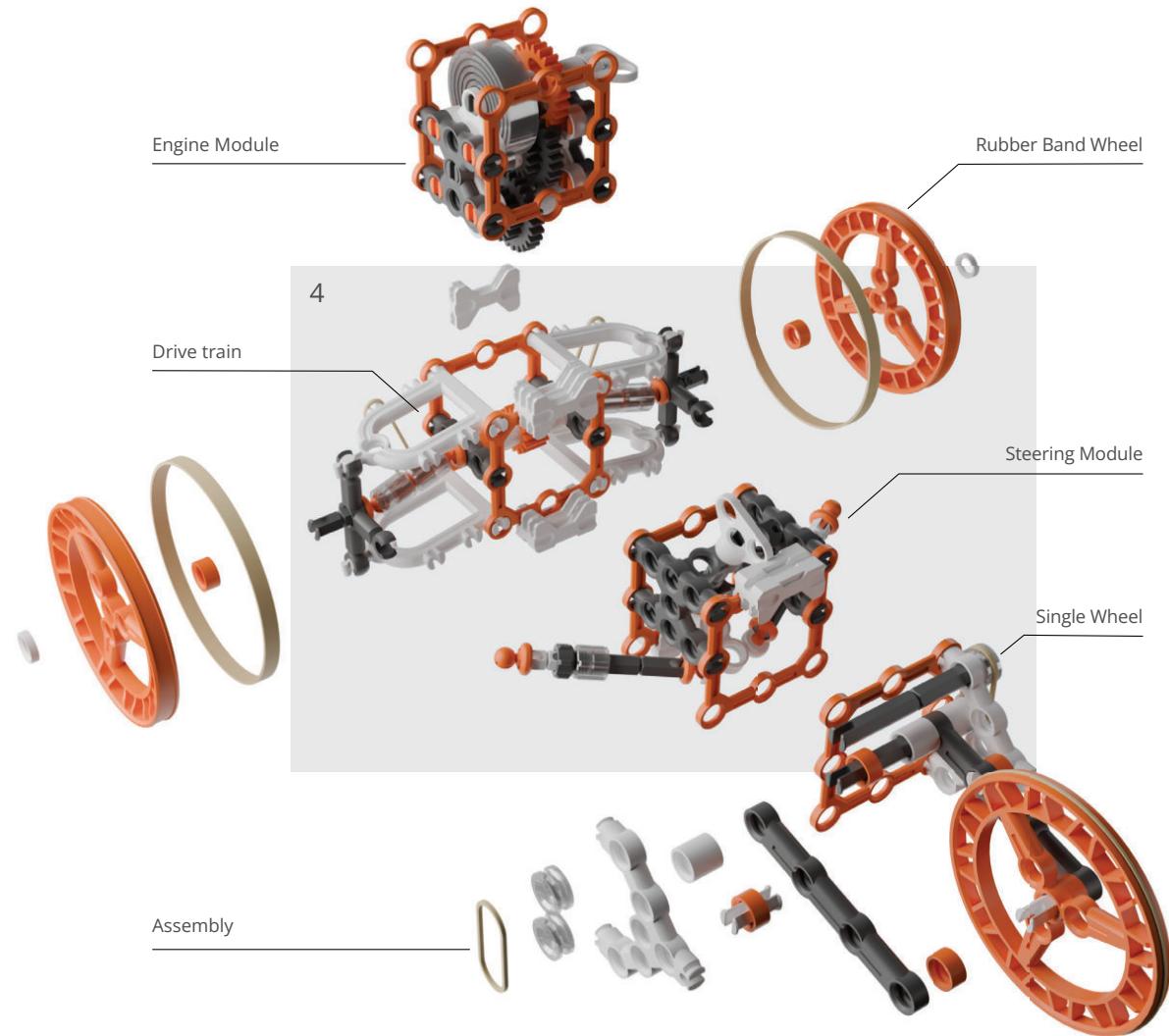
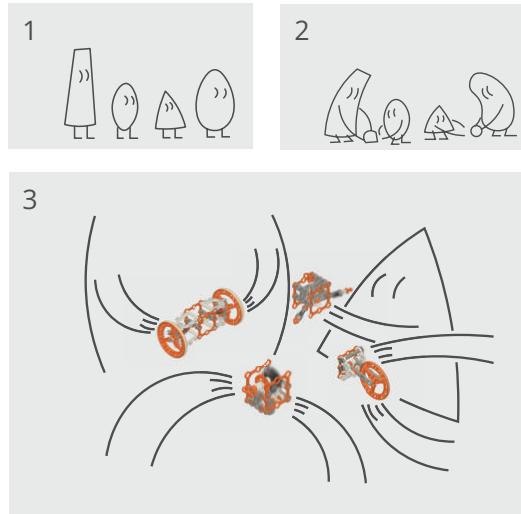
ROVER is a construction toy that emulates the experience of building an exploration vehicle with a team. It was aimed at kids and their families to learn and experiment together, specifically at an outreach event for an exploration vehicle building competition.

How might we improve the awareness and interest of kids 6-11 towards STEM?



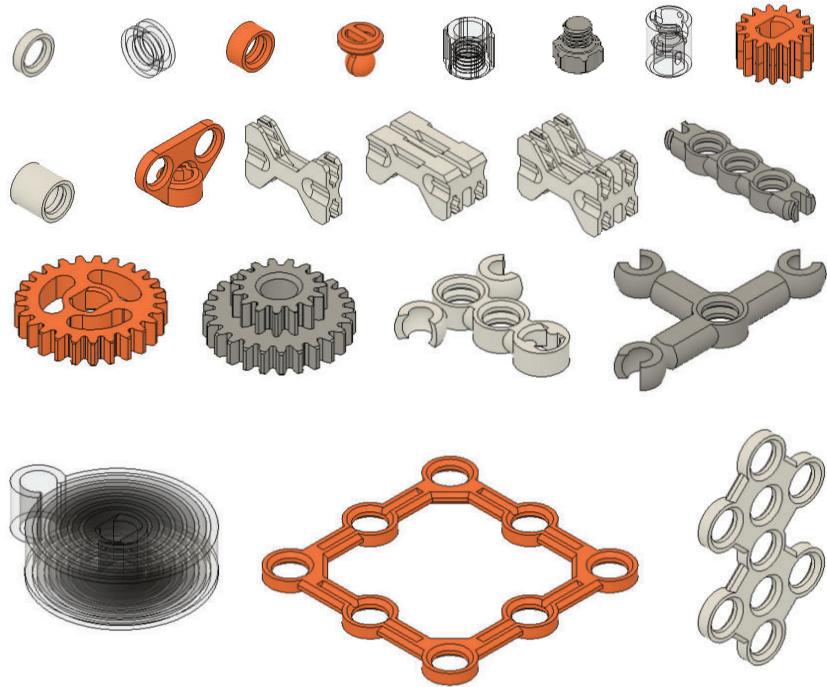
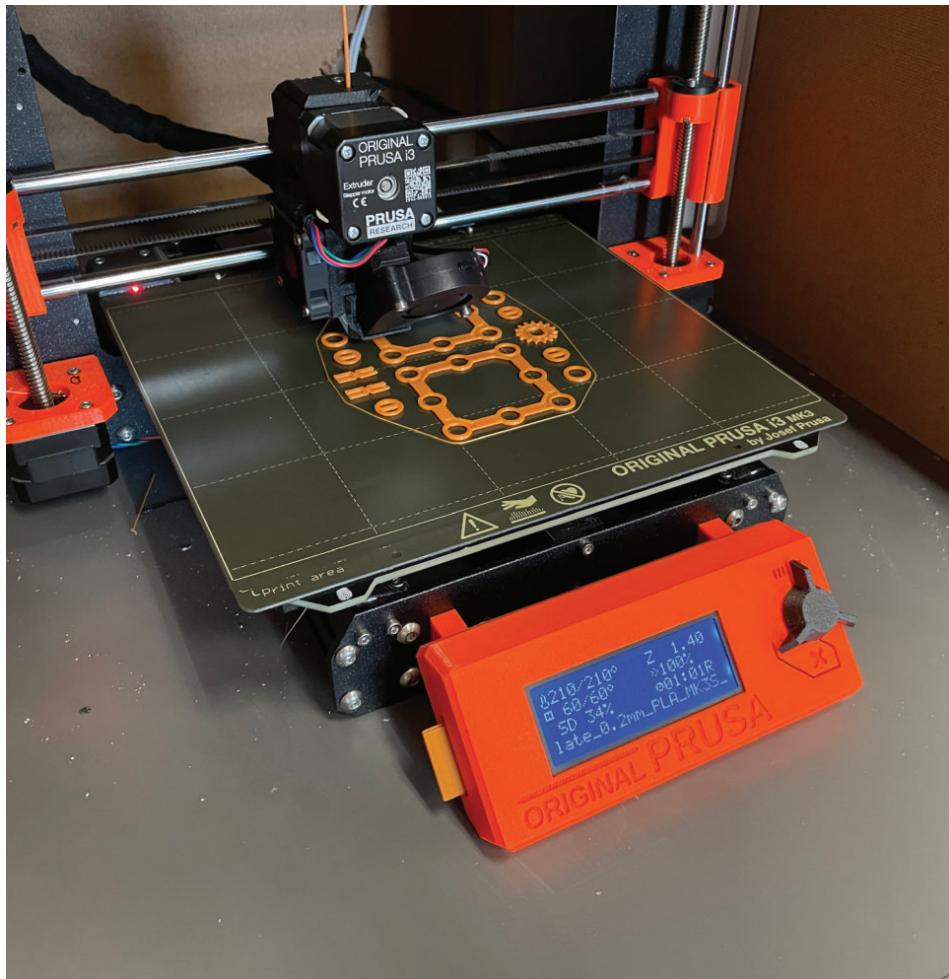
A Modular Building System

Vehicles of any number of different configurations can be built using the ROVER construction system. Unlike similar products however, each module serves a unique mechanical function, meaning any two different ROVERs will have different capabilities.



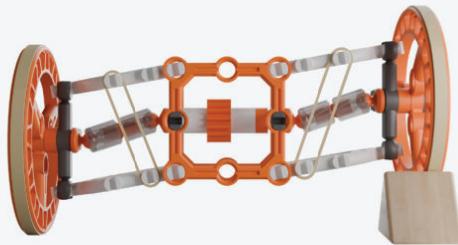
A Group Building Experience

ROVER is designed to be built in teams -- just like real exploration vehicles. Individuals in a team construct module cubes representing different mechanical functions like steering or the engine. Modules can then be clipped together into any number of different configurations.

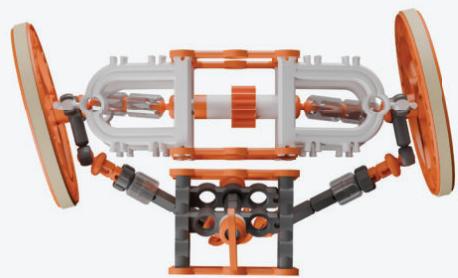


Designing For 3D Printing

Originally intended for an outreach event, several kits of the ROVER construction toy were built using 3D printers. The design was perfected to print reliably and without supports.



Rubber Band Suspension



Steering+Drive train

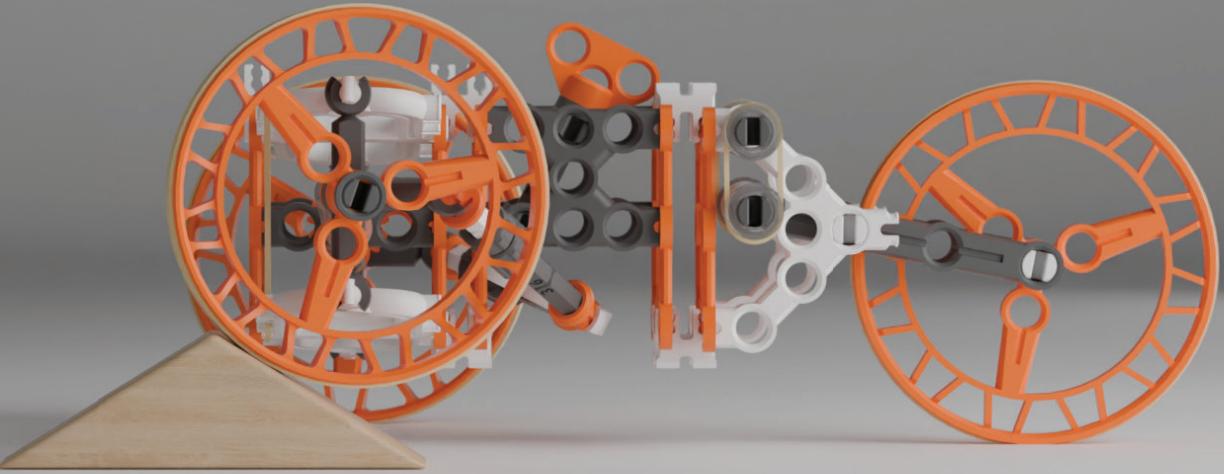


Coil Spring Engine

STEM Through Toys

ROVER breaks down the complexity of wheeled vehicles into digestible, bite sized chunks. Propulsion, suspension, drive, and steering are much easier to understand when they can be built separately, before clipping them together to see how they work as a single unit!

The outreach event featuring this product taught the ROVER team the importance of toys in building interest in the STEM fields. A crash course in precise and efficient FDM was the only way a large number of durable toys could be made quickly.



KAT.E

Desk Fan Companion

KAT.E is a multi-functional fan + desktop companion. She is designed to reduce plastic waste through her repairable design and customizable looks as to not be thrown away easily.



- Timeframe: 3 Weeks
- Role Academic Project at RISD
- Date: Student Project 2024



Introduction to KAT.E

Why care about repair and disassembly when throwing and buying is easier? KAT.E thinks **designing to encourage care + designing for repair and disassembly** is the answer. It comes with an adorable anthropomorphic design with customization options and an easy-to-repair setup.

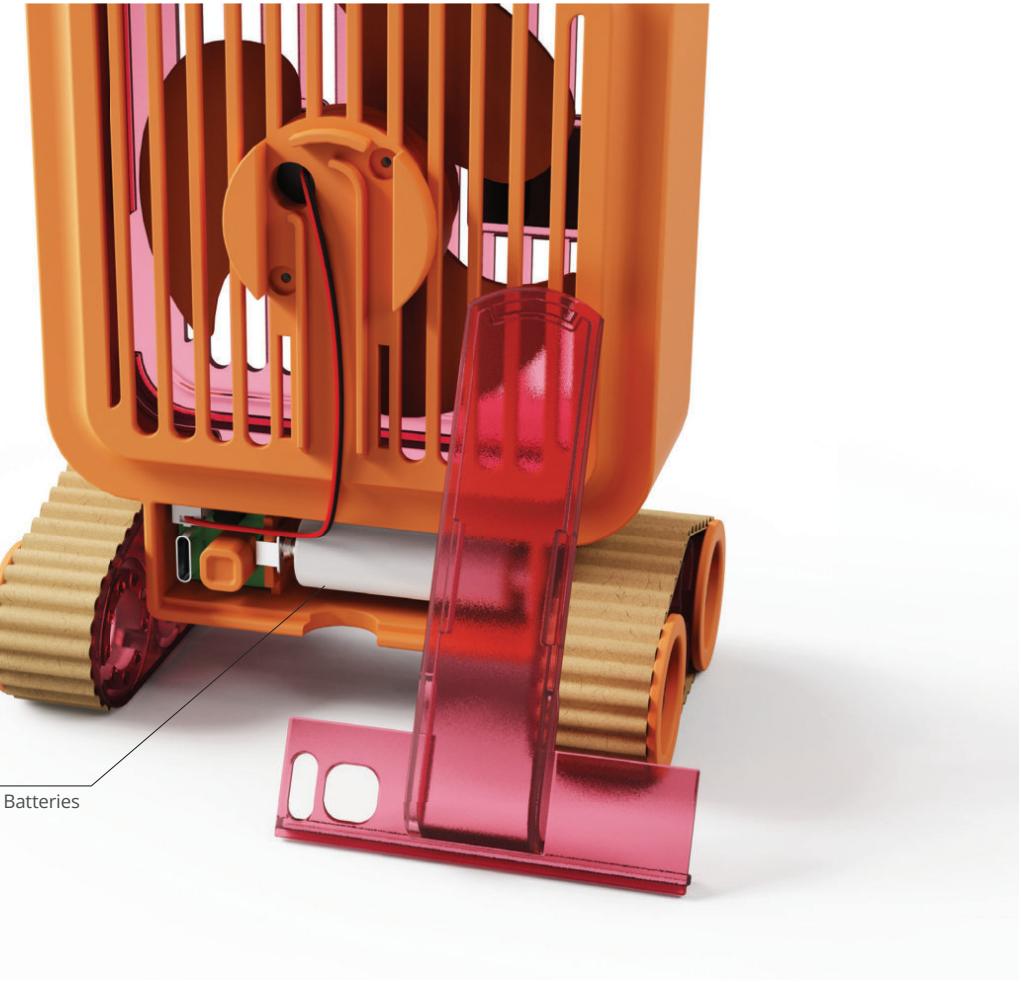


(Above) Different expressions and tracks are laser cut into the box art.



Longevity Through Customization

The desk fan comes in a pre-cut cardboard box. KAT.E encourages the user to customize their companion to their own liking, adding an element of personalization to the experience that encourages the user to keep KAT.E for longer.



Longevity Through Repair

KAT.e comes with a set of PCBs (front and back) and a battery. Its adorable appearance and interactivity encourage users to 'care for' it. The building process helps the user get acquainted to the internals, making repair rewarding.



User Profile:

Young adults (20s), in college or otherwise moving frequently. Concerned about sustainability but finds throwing away cheap goods, more convenient when they have to pack up.

- Likes cute things
- Concerned about the environment
- Buys cheap, disposable goods







Shelle

A modular, multipurpose care product designed for the Chinese and East Asian market and caters to general and culturally exclusive practices in the maintenance of good health.

- Timeframe: 3 Weeks
- Role: Professional Project at Rozeva
- Date: 2025



Swappable Heads for Elaborate Care

The main body of Shelle serves only as an interface (buttons), charger and a battery. Different heads can be attached to offer different kinds of Chinese medicine specific care in a compact, accessible package.



**Heat and Electrical Stimulation
Massager:**

This head uses its smooth contours to hug the skin whilst the metal probes perform electrical muscle stimulation and the red lights has benefits like encouraging collagen generation. The prongs are also heated.



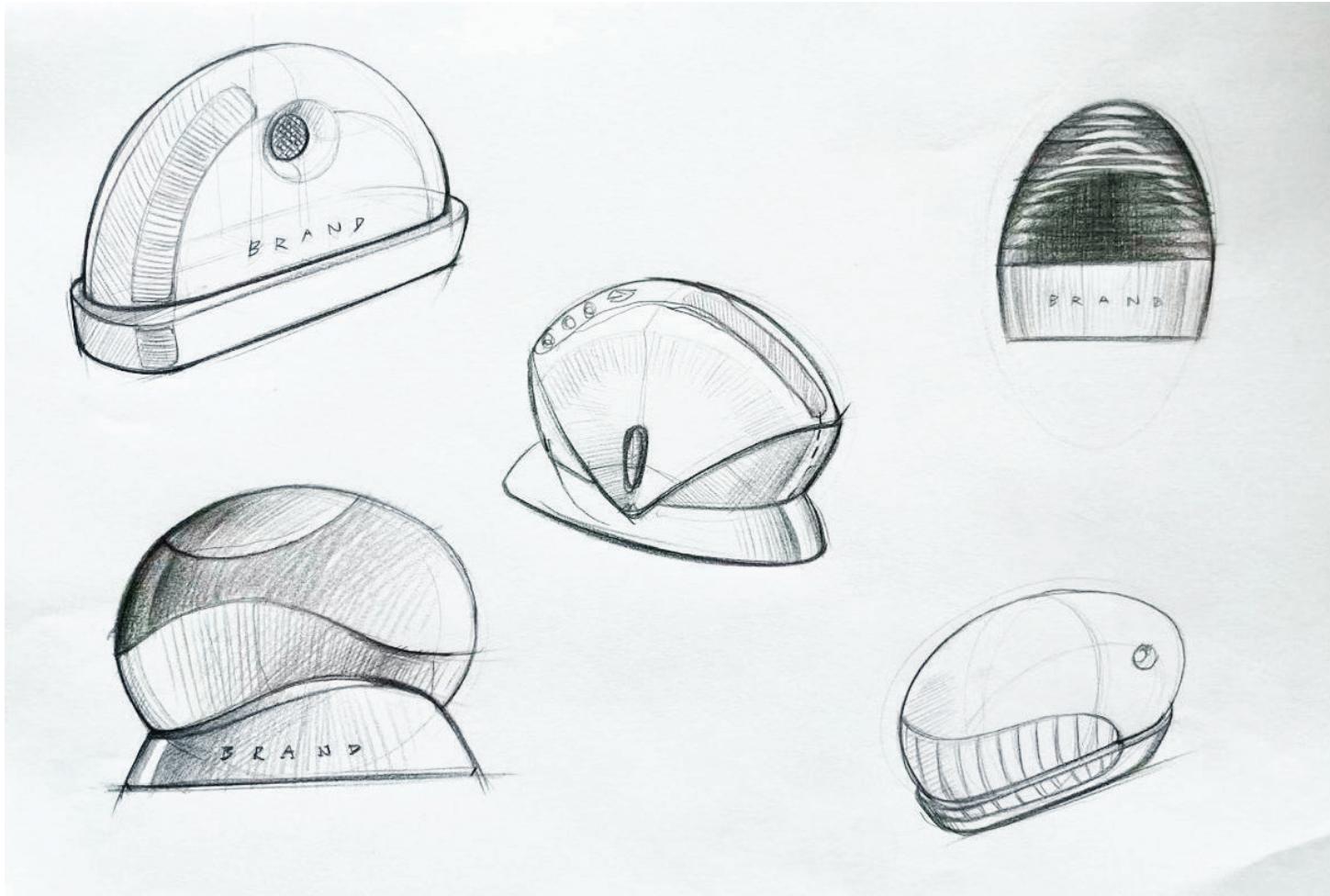
Massage Comb:

Though called a comb, this device is designed to mimic acupressure tools and stimulate the scalp for a relaxing and lifting effect.



Guasha (Scraping Therapy):

Traditional Chinese medicinal tool involving a smooth edge. Firmly scraping across the skin increases blood circulation and reduces muscle pain.



Sketching and Ideation

Compact electric care products are common in China, so standing out visually required a different approach. Most of the sketches are inspired by graphic designs, for example, rather than by existing products like many others on the market.

Final Forms

The result are two distinct form which are both easy to manufacture and ergonomically sound. Functionally, they offer much in a small package thanks to the intelligent use of internal space.



Let's Get in Touch!

A lot of interesting work couldn't get featured here. If anything you've seen so far or is otherwise on this page, feel free to get in touch.

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