



Farshad Saffari

An Industrial Designer who cares about the **experiences and interactions** of users with **devices** and is eager to **humanize the recent technologies** to empower people to overcome the complexity and uncertainty of the contemporary world.

Experiences

- 01/2022 - 04/2022 Polifactory - Talent in Residence
"Conducting research on a haptic navigation system to improve the navigation experiences"
- 10/2021 - Present ISS s.r.l. - Freelance Industrial Designer
"Designing a muscle therapy product and preparing the 3D printed prototype"
- 07/2021 - Present Zymio - Freelance Interface and Experience Designer
"Designing UX & UI modest fashion marketplace desktop and mobile website design"
- 05/2021 - 12/2021 Accessory Power - Freelance Industrial Designer
"Designing, 3D modeling, rendering for Enhance and GoGroove brands"
- 02/2021 - 04/2021 Innobrain - Freelance Industrial Designer
"3D Modeling, 3D Printing EEG device"
- 03/2020 - 06/2020 Tinker Design Limited- Product and Experience Designer Intern
"3d Modeling, animation, rendering, experience design"
- 02/2019 - 02/2020 Braun - SAES Group - Ferrero - European Space Agency - Student Designer
- 11/2018 - 12/2018 Teaching and holding 24 hours Smart Product and Smart Home design and prototyping workshop at Isfahan University of Art
- 05/2017 - 09/2017 Value Innovation Center - Product Service Design Intern
"Designing services for improving the acceptance of new fintech products"

Education

- 2019 - 2022 MSc. Integrated Product Design
Politecnico di Milano - 110/110
Thesis "Tactile Navigation Product System to improve urban life experience"
- 2013 - 2018 BSc. Industrial Design
Art University of Isfahan - 18.71/20
Thesis "Smart product design to improve the everyday life of design students"

Achievements

- 2020 - Hack The Crisis Winner
Canary Biometrix for diagnosing COVID-19 at early stages
- 2020 - Finalist Global Grad Show for COVID-19 - LifeLine
- 2020 - A'Design Award Winner
Furniture, Decorative Items and Homeware Design, PinTheTime
- 2019 - Finalist Vodafone 5G smart city and smart campus challenge
Wellness at Work
- 2018 - Featured in Global Grad Show (Dubai Design Week) - NAJI

Certificates

- 2022 - A Simple Framework for Designing IoT Products - PTC
- 2022 - New Business Markets in the Internet of Things (IoT) - PTC
- 2022 - Introduction to User Experience Design - Georgia Institute of Technology
- 2022 - Introduction to Haptics - Stanford University
- 2022 - SOLIDWORKS Sheet Metal - LinkedIn Learning
- 2021 - Smart Product and City Design Certificate - INSA Lyon Spring School

Skills

Rhino 3d	Adobe Photoshop
Grasshopper 3d	Adobe XD
Keyshot	Figma
Blender 3d	Arduino - C++
Fusion 360	JavaScript
Solidworks	Python

Prototyping and Modeling Making
Creativity and Innovation
Adoptation
Decision Making
Product Evaluation
Internet of Things & Smart Product
Design Thinking
Teamworking
Research and Trend Finding

Languages

English	TOEFL iBT 99
Italian	B1 - Attending in a course
German	B1

2022



Hi!

Design Portfolio

Farshad Saffari Ghandehari

Industrial Product and Experience Designer



Tactile Navigation System

NAVITILE



Freshener and Sanitizer for
Public Spaces

Breeze



A Companion for Better
Hygiene

Washi



Personal Development AI
Enabled SCP

NoGoMo



Other Projects



New Sanitization System for
Circular Fashion

Nale



5G Well-being Monitor

Welness at Work



Planner Clock

PinTheTime



Workout Tool for Space

Exerity



Tactile Navigation Product System

Farshad Saffari

As a talent in residence at Polifactory

Supervisor:

Stefano Maffei











What is Navitle?

Navitle is a wearable **tactile navigation** product system that utilizes **haptic technologies** to improve the **navigation experience** in and out of cities.

As a result, this project became a **platform** for **development** of other haptic devices in different environments.

-  Reduced sensory overload
-  Improved Navigation Experience
-  Easy to learn
-  Intuitive
-  Directional Information
-  Opportunities to be used as a platform, in navigation, fitness, healthcare, and as an open-source platform for makers and researchers.

My Contribution:

Research●Ideation●3D Modeling (Rhino, Fusion 360, Blender)●Prototyping (Arduino, KiCAD)

The project started with a deep research and study about haptics and use cases of it.

Haptics is about anything related to the sense of touch and divided into:

- Kinesthetic
- Tactile

There are several different situations to use the haptics and I have decided to focus on:

- Guidance
- Abstract Communication
- Background Awareness

Research Question:

How could we **improve** the **urban life experience** by using **haptic technologies**?
I wanted to use haptics to **reduce sensory overload** on eyes and ears and improve the **urban life experience** by **removing distractions** and **concerns** related to navigation.

	Lightweight	Compact	Reliability	Low energy	Affordability	Durability	Wearability	Easy to control	Response time	Comfortability	Easy to perceive
Normal Indentation Servo Shape Memory Alloy Piezoelectric Micro Fluid/Air Pockets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skin Stretch Servo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vibration Linear Resonant Actuator (LRA) Eccentric Rotating Mass (ERM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heat Peltier Elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrocutaneous Electro Stimulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Background Research

Haptic wearable for



Urban Navigation

- Around city
- Tourism
- Micro Mobility



Closed Space

- Campus
- Hospital
- Warehouse
- Office

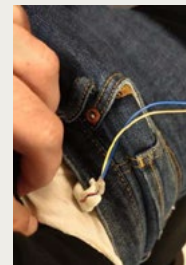
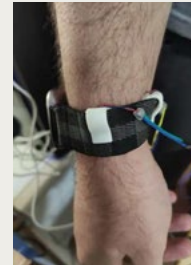


Nature/Open Space

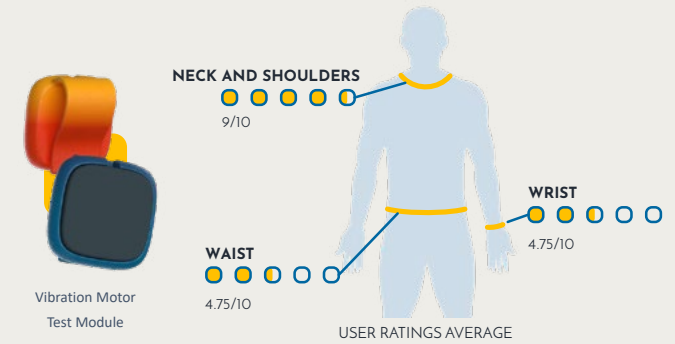
- Nature
- Hiking
- Mountain climbing
- Running

Using vibration and using ERM motors was the best choice for the Navitile according to my analysis.

To understand the best motor type and location I have conducted some **user test** and also considering the **durability** of the product, the **user experience** and **anthropometrics** we I have chosen to use neck and shoulders for our use.



User test with 3 motors - 3 location - 3 user



Previous work by others are:

- Very specific use cases
- Only Academic research
- Focus on technology and mechanics not design or the user.
- Low attention to the experience or product design

I wanted to focus more on:

- Production considerations
- Durability
- User experience

Inspiration

The number of **tactile patterns** that human brain can handle and remember are **limited** to around **20**. According to different situations that this device could be used I have created two lists of patterns. Level 1 patterns have **higher priority** and need to be simpler and easier to learn. Level 2 patterns can use more abstract vibration patterns.

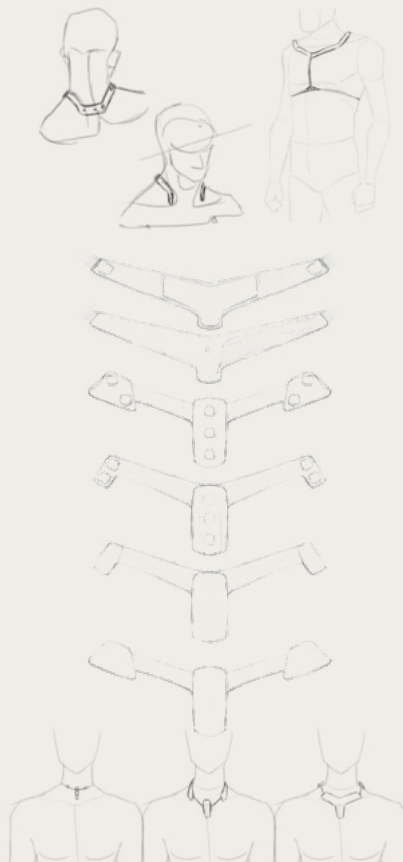
Information to provide

Level 1 Communication:

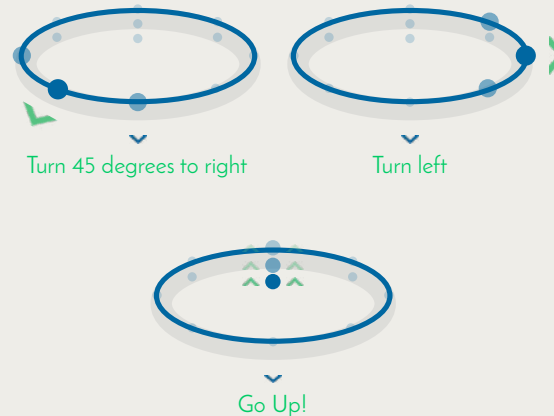
- Turn Left
- Turn 45° Left
- Turn Right
- Turn 45° Right
- Go Straight
- Turn Back
- Turn 45° Left Back
- Turn 45° Right Back
- Go Up
- Go Down
- Wrong Way
- Compass Mode

Level 2 Communication:

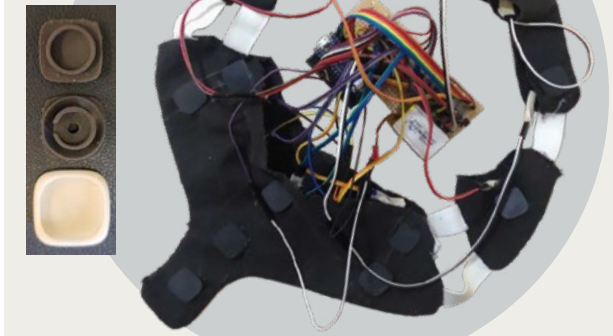
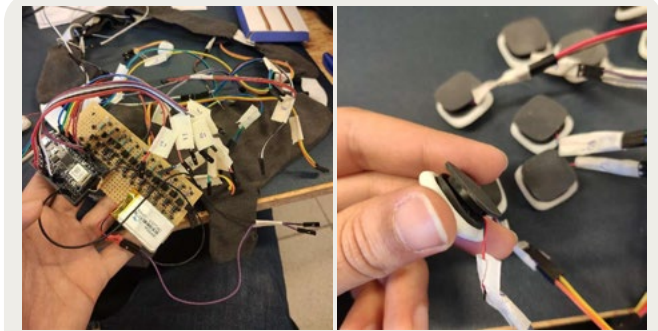
- Remaining Time
 - >20 min
 - 5<x<20 min
 - 5> min
- Continue
- Arrival
- Started
- On/Off
- Stop
- Low Battery
- Connected



8 motors every 45° as more motors doesn't improve the quality of navigation. 3 motors vibrate at the same time for simple navigation tasks to give the user differentiation points, and possibly to create haptic illusions of degrees between each 45 degrees.



Ideation

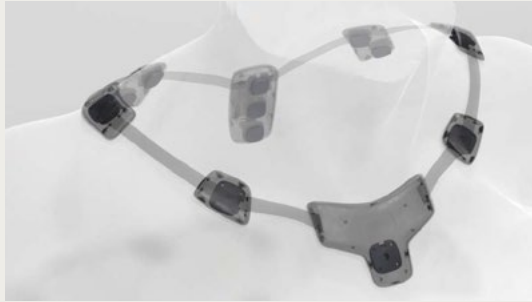


1st prototype, made of fabric, rigid resin 3D printed housings for motors, and flexible resin 3D printed to be in contact with body, have better grip and feels soft to touch.

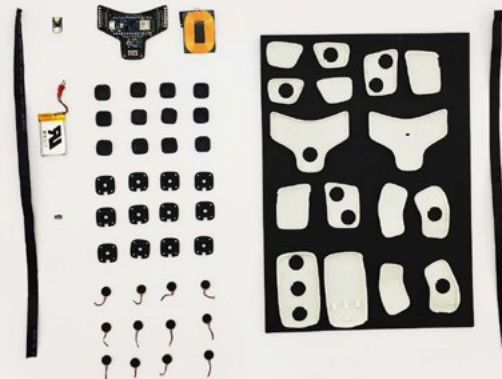
Implementation

1st prototype's Weaknesses:

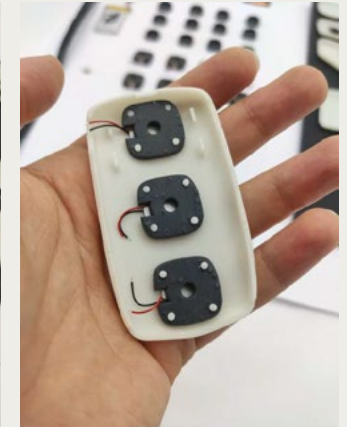
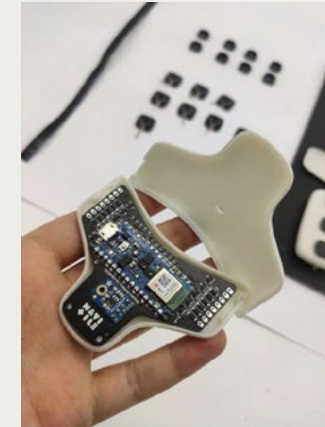
- Motors need support
- The product needs to be smaller
- Electronics need better ways to be implemented



8 rigid parts that are connected with a flat cable and fabric. It contains 12 motors, 8 each 45 degrees and 4 more on the back to create a haptic display. Each motor has its own flexible mounting case with a pad to be in contact with the body.



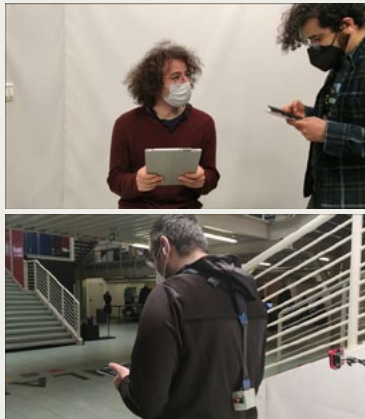
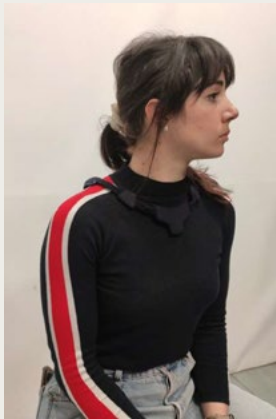
I have used KiCad to design a custom PCB for it and mounted an Arduino Nano 33 BLE sense. With this model of Arduino, I could also get the directional information and relative position of the user, in addition it could give us the possibility to use the gesture sensor on it to control the device.



2nd Prototype had to be:

- Minimal
- Discreet
- Representing Urban Life
- Easy to use
- Comfortable

Implementation



Questions:

- I think that I would like to use this system. **3.33/5**
- The product is comfortable to wear for a short period of time. **2.67/5**
- The product is comfortable to wear for a long period of time. **4.67/5**
- The clues are easy to follow. **4.67/5**
- I would imagine that most people would learn to use this system very quickly. **4/5**

User test:

- 3 users
 - In campus

- 21 functions
 - 11 primary
 - 10 secondary
- 4 situation
 - Walking, sitting, navigation, single motor test

Correct readings

85%

Sample navigation
Consisting primary and secondary functions

64%

Identifying each single motor

79%(sitting)

82%(Walking)

Primary Commands

- Left Back
- Front
- Right
- Right back
- Back
- Left
- Go Up
- Go Down
- Wrong Way

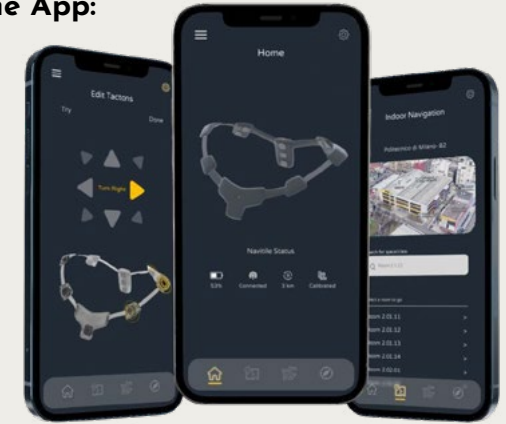


Lightweight
fully functional
prototype

125 
gr

Implementation

Phone App:



- Training
- Select navigation mode
- Choosing destination
- Edit patterns
- Device statuses
- Integration with other apps

Scale up opportunities

- Navigation
- Fitness
- Healthcare
- Open-Source Platform
- Navigation
- Tourism
- Urban Safety
- Personal trainer
- Adjusting training form
- Fitness tracking
- Correct posture
- Fall detection
- Body balance
- Makers & researchers
- Materials to build
- APIs

Further development

nale.

New sanitization system
for circular fashion

Farshad Saffari
Ana Maria Gonzalez
Gloria Diaz
Oriane Rainero
Sebastian Gonzalez



POLITECNICO
MILANO 1863



What is Nale?

Nale system aims at changing the sanitization system in order to extend the lifetime of our garments and save resources and time for the consumer.



Time Saving



Better care for sustainability



Necessary laundry only



Water and Energy saving



Money Saving



Reduction of Toxic agents

My Contribution:

Ideation • 3D Modeling (Rhino + Fusion 360) • Rendering • Drafting • Prototyping • UX/UI Design



Check out the descriptive video
<https://youtu.be/2-39UY3Yfvs>



90%



60ltr



6,7

The need for this solution comes from the identification of the following big issue: the damage of garments and excessive resources consumption due to the overuse of washing machines.



Nale system aims at extending the time between each necessary laundry by tackling the two main problems: **stains and odours**

With Nale you can prolong the time between Laundry washes to avoid overwashing while still feeling fresh, extending the lifetime of your clothes and helping the environment.

Design Challenge



1. Powder funnel
2. PRE powder

3. ST pills
4. DO pills

5. PRE Nale
6. Charging cable

7. ST station
8. DO Nale

9. ST Nale
10. ST pads

11. ST brushes

PRE. is a small portable and analogue product to pre-treat garments when stained and facilitate the posterior removal. Afterwards, at home, the S.T automatic stain remover can be used to take care of stains in around five minutes.

D.O. is a simple deodorizer based on electrolised water that will refresh and sanitize your clothes fast and comfortably.

All of the products are fed with efficient natural solutions to care for the environment and leave garments ready to be back in the closet or to be worn without needing to use the washing machine that often.

The full system is supported with an app that helps to correctly manage the products and makes the user aware of his/her impact.

The Nale System

D.onale

Clothes freshener and deodorizer



Control Interface
ON/OFF Button
Electrolyzing Button



Design For Disassembly
Snapfit And Hidden Screws



Spraying button
Continuous press for spraying



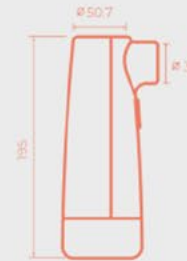
Easy Maintenance
Screwable Electrodes
Battery Access (USB-C Charge)

Electrolysis

Water + Salts + Electricity
Antimicrobial Solution With
Sanitizing Effect

D.O Nale

600
grams



Circular/Resistant Materials



Encasing
PHA



Electrolysis
Module
Anode/Catode
Fe/Al



Solution Container
Recycled Clear
Polypropylene

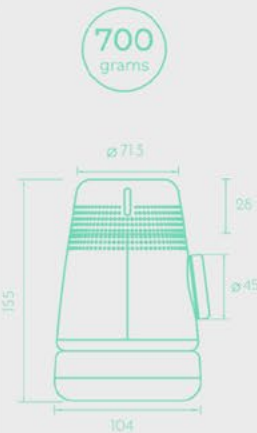
D.O. is one of the most relevant products of the family since it will be used on a daily basis to refresh, sanitize and deodorize garments before putting them back into the wardrobe and being able to wear them for more occasions before washing them.

It is a completely safe product that quickly sanitizes and refresh your clothes spraying electrolyzed water, without needing to achieve high temperatures. It is divided into two parts, the body and the water deposit.

From the deposit, the electrodes, electrolyze the water and the pump drives it up the body to the spray nozzle.



D.O works with effervescent pills that are based on sodium chloride to create the hypochlorite sodium when electrolyzed. They come in a package of 90 pills, which in daily use basis means 3 months. Each of the deposit loads can be used for up to eight garments.



Circular/Resistant Materials



Encasing
PHA



Brush
Bamboo



Lower Restrain System
& Solution Container
Recycled Clear
Polypropylene

S.T. nale mechanically and automatically gets rid of stains in about 3 minutes. It includes 4 different programs and pills and 3 different brushes to adapt to garments in the best way.



It has two deposits, one to add the pill and prepare the cleaning solution and one for rinsing water.

On the bottom, the brushes can be attached and replaced to eliminate the stain by an eccentric rotation without damaging the fabric. It also includes a Restraint System to hold clothes in place centering the stain and collect the water released.

The interface provides setup instructions and allows to easily select the program using the rotational knob.

The product works with thanks to the solenoid valve that will open the solution or rinsing deposit depending on the process step, the pump will drive the water to be sprayed and the motor will turn the brush.

s.T nale

Clothes Stain Remover

Windows
To Check The Remining Water

Solution Container
30ML Capacity
Nozzle 0,05Lpm

Rinsing Water Container
80ML Capacity
Nozzle 0,05Lpm Spraying For 1,5min

OLED Screen

Body

Brush

Top Restrain System

Lower Restrain System
Contains Drained Water



Charging System



Assembly System

S.T Nale

PRE·nale

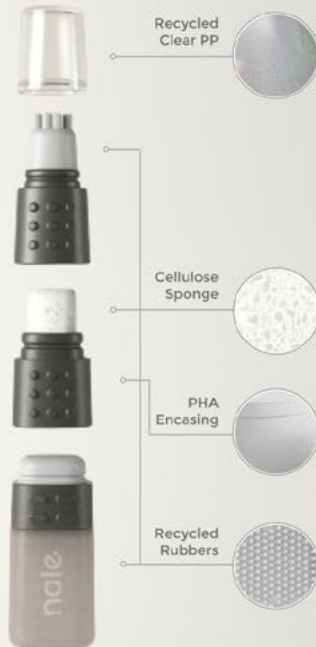
On-the-go Stain Remover

3-PART PROCESS

Brush
Remover Debris/
Crust From Stains

Absorb
Reduce Excess Fluid
And Help Dry

Clean
Release Cleaning
Solution



The first step to remove a stain is to pre-treat them on the moment they happen to facilitate the cleaning later. That is the purpose of PRE, a simple, analog, and portable product.

The products uses removable joints such as twist bottle necks, annular snap fits and tight fits that make it easy to disassemble and replace its components, and drive the user through the pre-treatment process.

The solution in this case is sodium bicarbonate based powder, to facilitate the filling and mixing with water due to the small size of the product.



PRE. Nale

LESS POLUTANTS

LESS RESOURCES



47,99%
Microplastic
4727771

Millions of particles



47,75%
Detergents
886 T



46,72%
Energy
25855 MW



47,70%
Water
4432 ML



We have compared the S.T and D.O performance with a general washing machine cycle to see the impact it can have if the 15% (early adopters) of people who live alone in Italy use Nale. D.O is using less than 2% than a washing machine. We would not be releasing any microplastics and we would be reducing the detergent use and time to less than half.

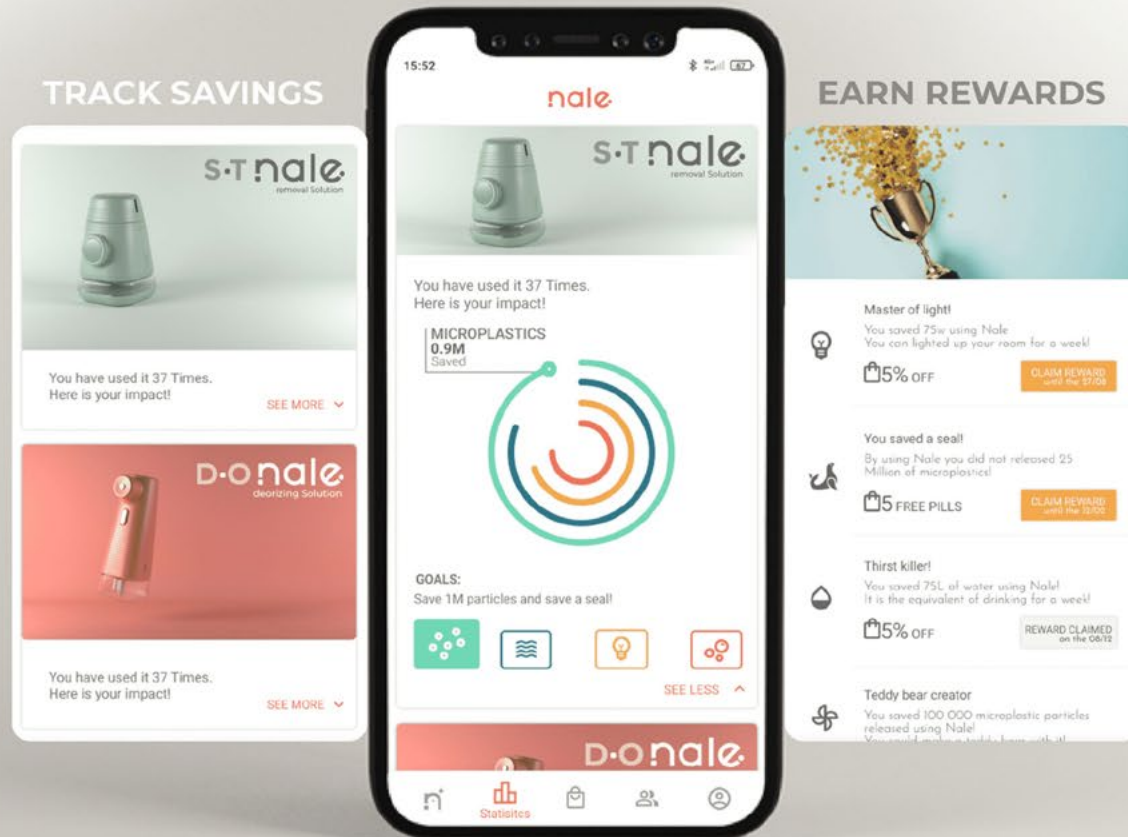
Impact

APP·nale

Connecting the system

Connectivity

Nale APP



APP Nale

An important point on the system is the Nale App. It was created with the following key points and goals in mind:

Establishing a connection between the user and the products in order to make them aware of the impact they can have by changing their cleaning habits.

Gathering information about the cleaning and sanitization habits to provide it to third parties.

Providing access to all the information about the products in order to solve all the possible questions or issues and ensure the correct use of them.

Facilitate the purchase of the devices, the maintenance, and the hiring of subscription models to increase the revenue and make the system use smooth.

Encourage the relationship between the users creating a user community where to exchange information and experiences about the system.

Give access to complementary information about sustainability and clothes care aiming to raise curiosity and awareness.

To make the user aware of his/her impact and encourage the use of Nale we have set an achievement/reward system. By using the products, you can see the resources you saved compared to a washing machine, the things you could achieve with that savings, like lighting up your room for a week, and receive discounts and promotions when accomplishing the achievements.



Clean it, save it, nale it.

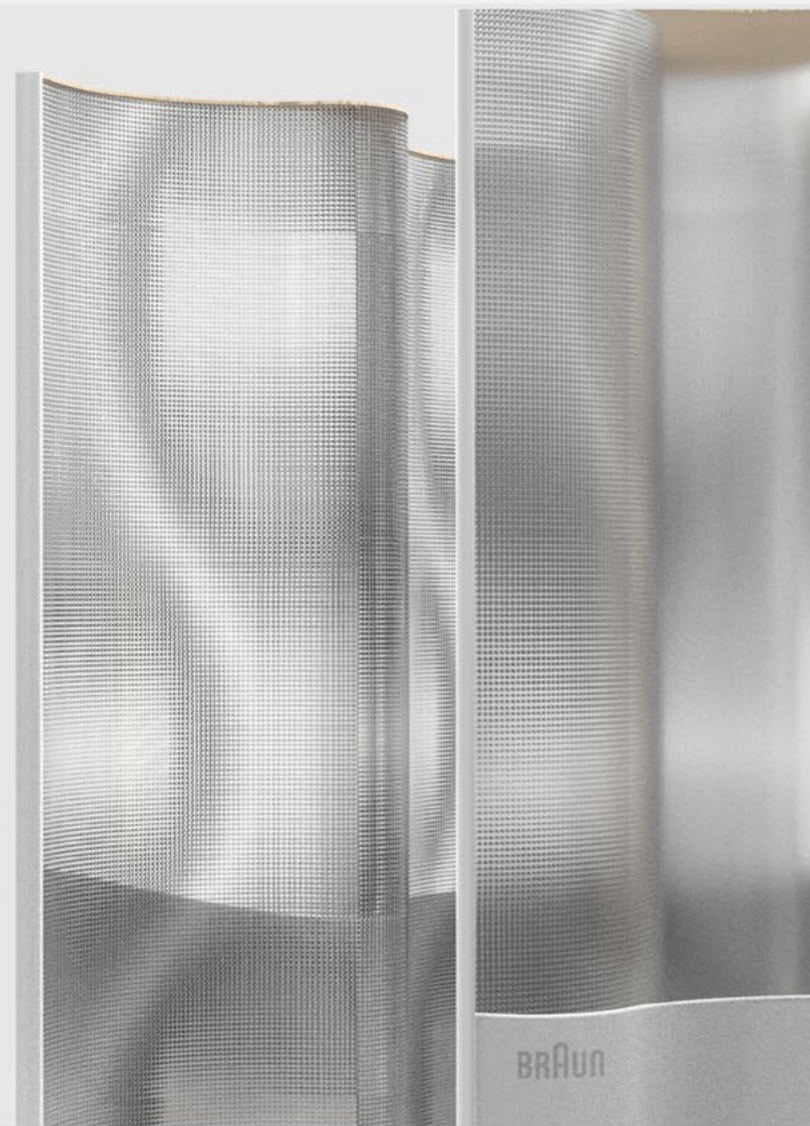
Breeze

Refresher in Public Spaces

Farshad Saffari
Alessandro Fasano
Caterina Castelioni
Hannah Roche

BREEZE

Find your freshness.



DēLonghi Group

BRAUN



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What is Breeze?

Breeze is a walk-through device which can be installed in different public spaces like airports and shopping malls, to let the people who pass through it feel a refreshing breeze on their skin and feeling ready to continue their day.



Touch a gentle breeze



Smell clean cotton sheets



Color smart glass will give users privacy



Sound of a gentle wind in the forest

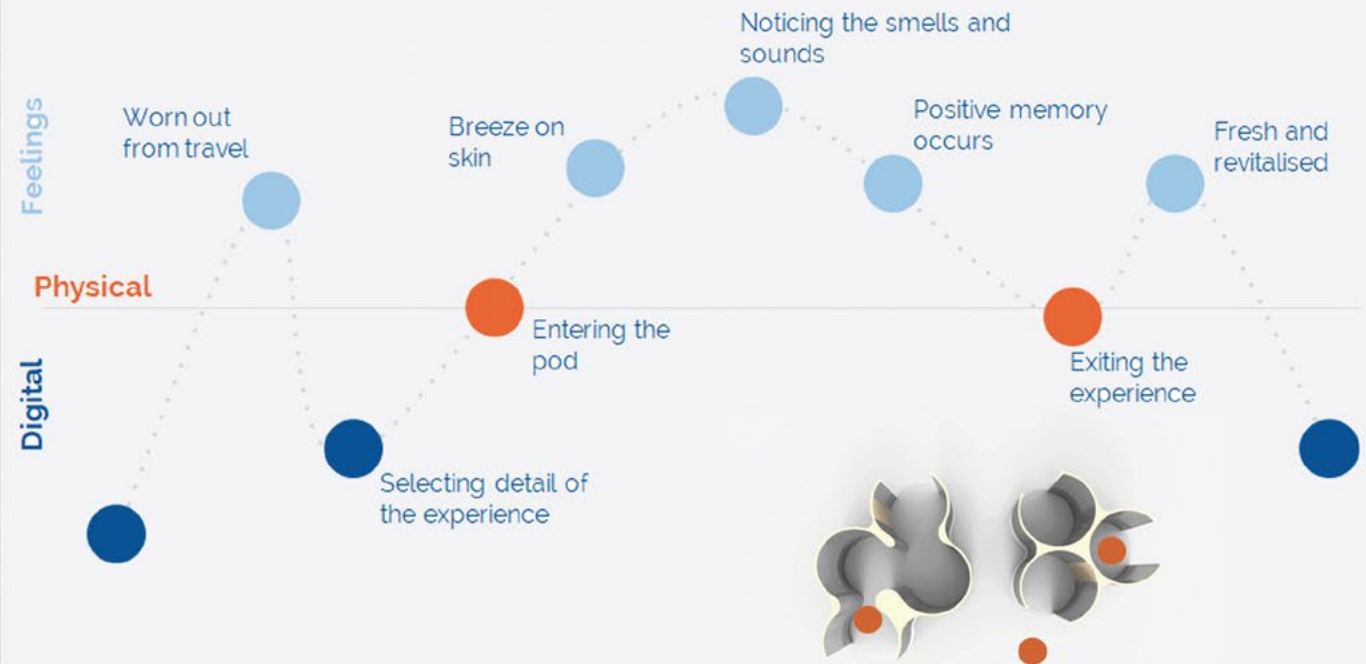
My Contribution:

Ideation • 3D Modeling (Rhino + Grasshopper) • Rendering



Design for wellbeing starts with understanding the positive experiences in personas life and selecting one of them and deepen our understanding of it and extracting the meaning of the positive experience. Then we recognize the persona's psychological needs and find out the materials and skills which engage in this experience.

Design for Wellbeing



User can **walk through** the installation or take some time to experience the breeze **standing** on a single module.

Through this **gesture** they be encouraged to take time to rest and be **energized**.

Electrochromic glasses are **transparent** when no one is inside.

With integrated sensors glasses become **opaque** as the user passes through the device.

User can choose the **airflow level** and positioning as well as the combination of **sound** and **fragrance**.

User Journey and Experience



Double layer with holes in glass forces the air and creates the path



Fans are hidden on the lower part to create indirect ventilation



Diffuser spread a comfortable fragrance
Speakers dip the user into a memorable soundscape



Components



Creating **valuable partnerships** with brands in order to further the Breeze experience and audience

Customization



For the future implementation of this positive feeling of freshness and cleanness, we can envision Breeze integrated into different buildings structures and in autonomous cars to:

Seamless choice of combined sensations

Possibility to **share** the experience with other users

Cleanness and **sanitizing** purpose

Future Scenario

2019

WAW

5G Well-being Monitor

Farshad Saffari
Ilaria Tarozzi
Fabrizio Tropea





What is WAW?

WAW is a service to let people be healthier in all workplaces, which has a 5G connected device to monitor their well-being. This project developed during the Vodafone 5G Challenge for Smart City and Smart Campus in 2019. The aim of this hackathon was exploring the design potential of the 5G network.



5G

Smart 5G connected product service



Productivity

Improve work experience and productivity



Well-being

Physical and mental wellness



Satisfaction

Improve personal satisfaction and efficiency

My Contribution:

Ideation • 3D Modeling (Rhino + Grasshopper) • Rendering • Programming (Python + C++)(RaspberryPi + Arduino)



Standby



Bad Posture
Image Processing and
Machine Learning



Break Reminder



Noise Level



Light Level and
Temperature



Functions



Wellness
overview



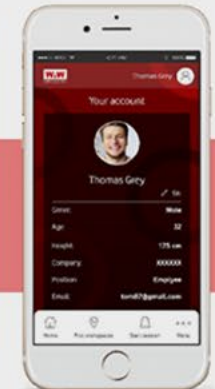
Posture



Homepage



Workspace
finder



Private profile



01. The employee goes to work

02. He searches for a free desk, suited to his needs

03. He turns on MAM, connects his APP and starts the work session

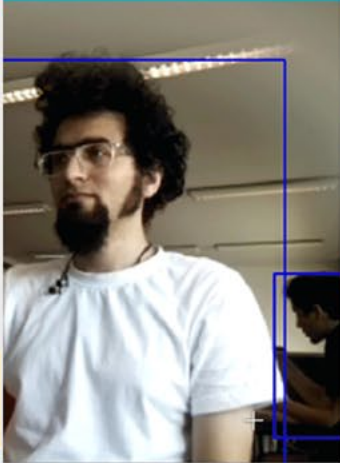
04. He can see his data collected in the APP at the end of the session



In the meanwhile, the company can see the average data collected by all the devices, useful to avoid wasting energy and to guarantee the employees wellness.

Mobile App and User Journey

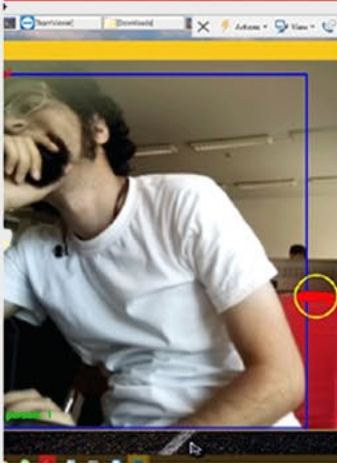
1A. THE CAMERA DOESN'T
DETECT RED COLOR



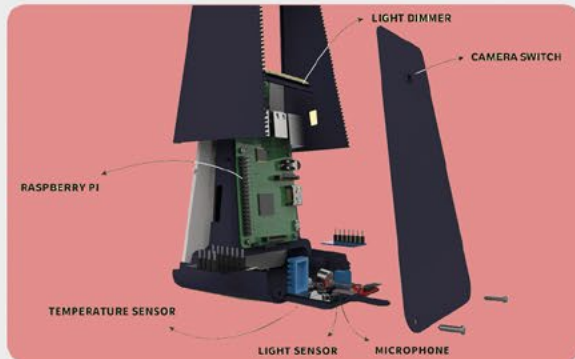
1B. THE LIGHT IS BLUE



2A. THE CAMERA DETECTS
RED COLOR



2B. THE LIGHT IS RED



For prototype and testing the idea we used a RaspberryPi and Image Processing with Python to recognize a color behind user as sign of bad posture.



Prototype and Architecture



Photoshoot

Washi

A Companion for Better Hygiene

Farshad Saffari
Ana Maria Gonzalez





washi



What is Washi?

A friendly companion that prompts behavioral change and allows the whole family to build better hygiene and water usage habits.

Hand hashing is said to be the #1 tip for pre venting the spread of virus and bacteria. While this seems like a simple activity, it is usually not done properly and for the right time to make it effective, in fact according to studies about 97% of people wash their hands incorrectly.

With a friendly display and customizable covers, it is a product that adjusts to both adults and children. Its technical simplicity gives it potential to be used in homes and public places like schools as a hygiene educational tool.

To provide a solution to this situation we crea ted Washi, a waterproof attachable device that helps people build hand hygiene and water saving habits by using nudge techniques that induce be havioral change, Washi works by using proximity sensors, time tracking, and easy to understand visual cues and feedback.

My Contribution:

Ideation • 3d Modeling (Blender) • Rendering



Check out the descriptive video
<https://vimeo.com/425287137>

2016

PinTheTime

Planner Clock

Farshad Saffari
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What is PinTheTime?

We do not look at the clock just to know the time; by looking at a clock we review the tasks that we have to do in a day at specific times in a day. All of us had experience of using a piece of paper to write down the obligations we have to do in a day, but many times we fail to do all of them; moreover, we forget to do them. It is a soft round clock covered with felt, with the use of pins and paper you can pin your tasks on it on the desired time of day. With PinTheTime you will never miss an appointment or task to be done again.



Analog not Digital

Using analog methods to reduce distraction with digital devices.

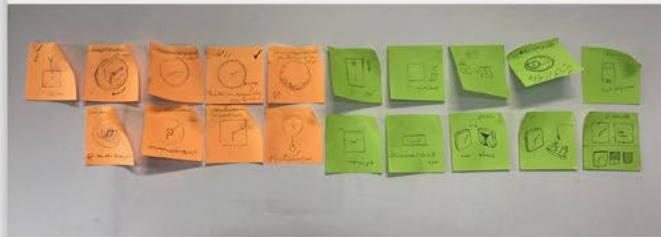
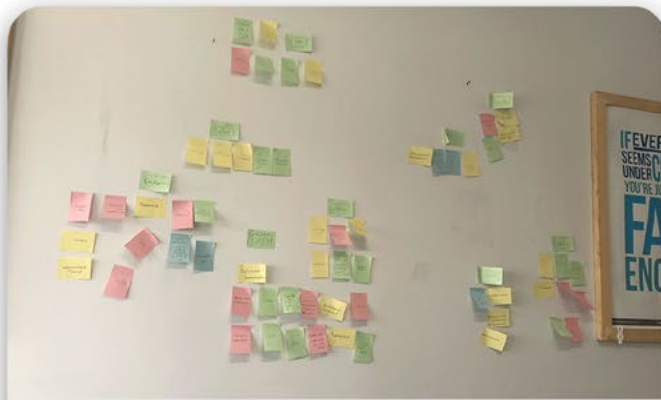


Planning

Having a plan and knowing what is your next task today makes you confident.

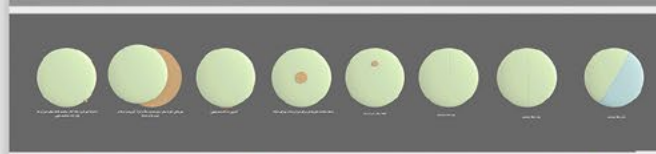
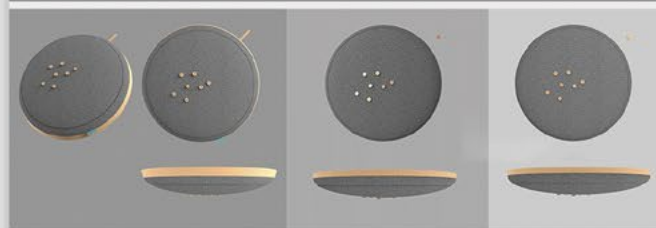
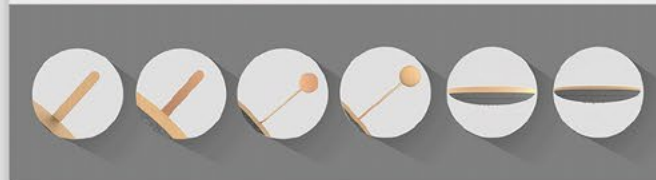
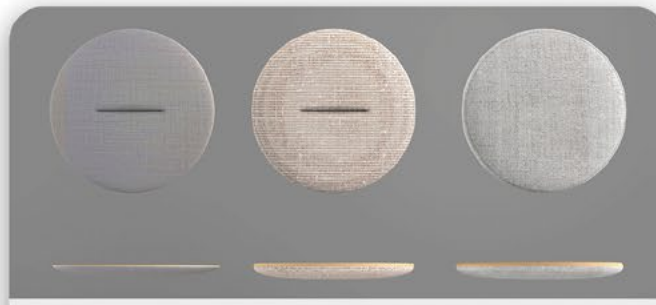
My Contribution:

Trend Research • Ideation • Mechanical Design • Prototype



PinTheTime developed through trend haunting and market researches to be presented in galleries. We tried to approach the meaning of time and the feeling about time and hours more than the number that we just read and we look through the meaning behind time and to-do lists.

Ideation



Development

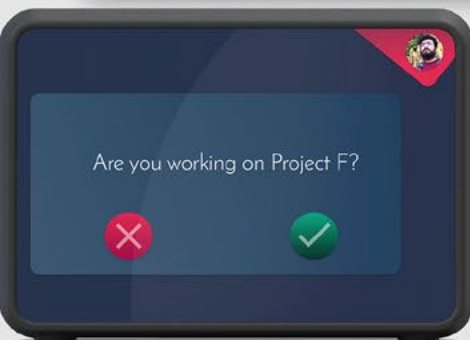


Prototype and Feedback

Personal Development AI Enabled SCP

Farshad Saffari





What is NoGoMo?

NoGoMo is about to help students to learn better and more, help them to plan their life and reach their goals and help them to be motivated and concentrated on the tasks they are about to do. It is designed after various iterations. About 40 different students participated in participatory design sessions, interviews, brain type tests and voted for the best ideas.

Knowledge



Keep track of what you learn and yourself up to date with NoGoMo's suggestions and training. Tell, type, or select what you learned to NoGoMo to let him know more about your knowledge.

Goal



Set goals, and with the help of AI understand what the steps are you should take to reach your short term and long-term goals. Moreover, schedule your life based on your skills and the future you want to have.

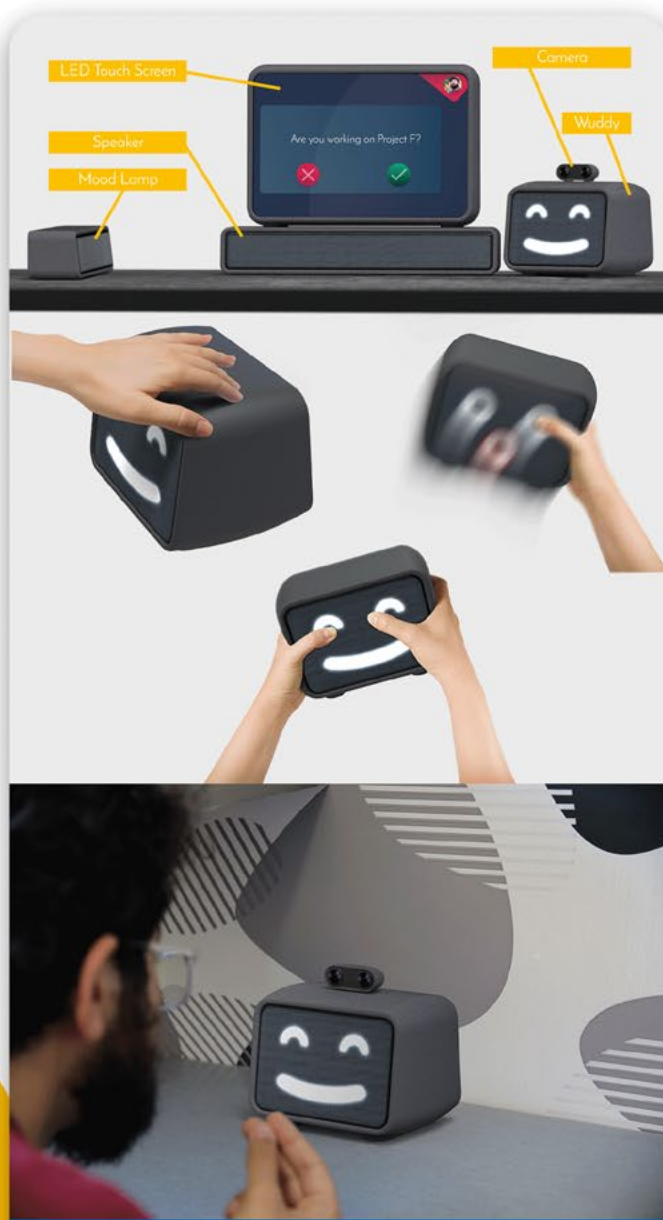
Mood



By taking advantage of IoT, we can enhance the user's learning experience and also break time. NoGoMo can optimize the environment according to the user's mood to help him achieve the most he can.

My Contribution:

Reaserch • Interview • Ideation • 3D Modeling • Rendering • UX and UI • Team Managment



Modules and Interactions

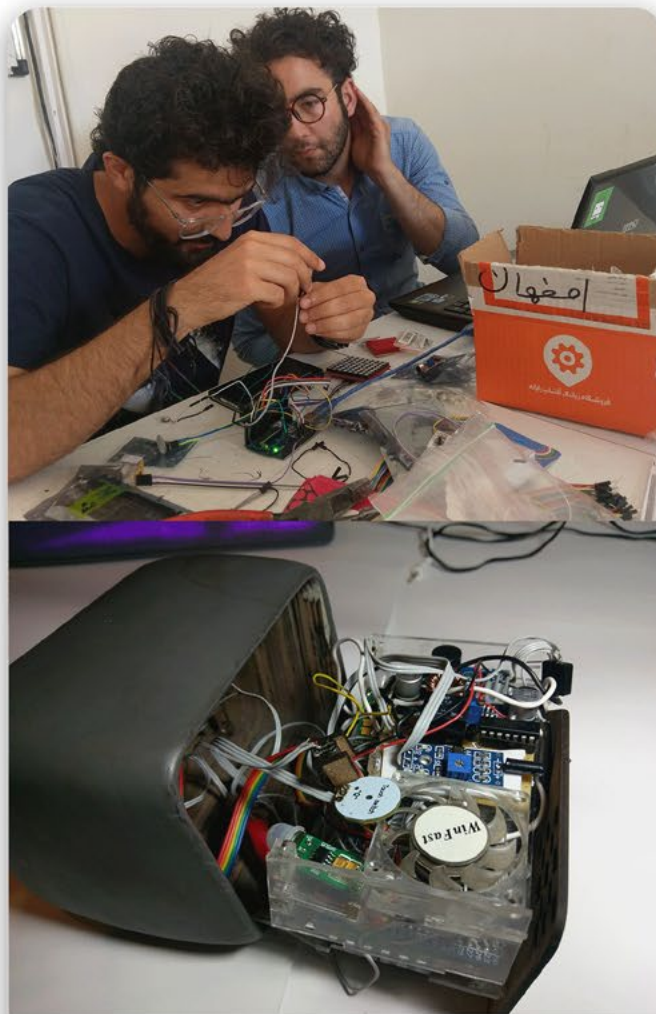


NoGoMo integrates different services with its services and creates a system for better learning. It gets info from the users by speech, type and selecting predefined info, user can shake the Wuddy to learn new things, or press Wuddy if he is tired, or caress it to input new learning or ask questions with speech. With using different AI technologies NoGoMo can keep track of user's learning and the sources and also come up with training and suggestion to help the user to improve skills over time. More than that create the best environment for learning for each user.

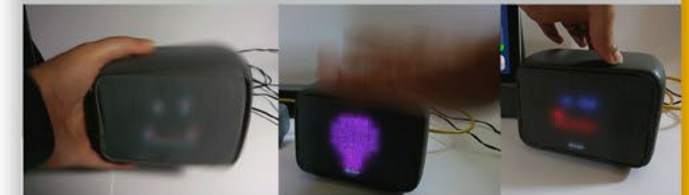
Workflow



Participatory Design



Prototype



Some functions of NoGoMo has been prototyped and evaluated. As the user sits in front of NoGoMo it senses him and starts learning session with a smile. With this smile, the user feels more concentrated on his work, because of feeling observation. The user can also ask questions about different topics and it gives audio feedback. It could sense touch, vibration, and pressure and give vibration feedbacks too.

Test

Exerity

Workout Tool for Space

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Edward Rossi
Caterina Castelioni
Greta Vergani
Alberto Pezzeti
Victoria Emond
Erin Lee



EXERITY

A flexible system able of adapting to the most varied situations and needs to bring fitness to every place and in every moment



What is Exerity?

Exerity is an exercise tool for astronauts to help them to improve blood circulation in their body by stretching and massage.

Inspiration is space, but it can also be used on earth for rehabilitation, gentle exercise, and fitness tool.



3D Printing

Possibility to print one's 3d object directly in ISS.



Materials

Free choice of the material to allow total customization on the space object



Dimensioning

Designed to adapt to the user's ergonomic dimensions perfectly



Level Training

Diversity in elastic band resistance to

My Contribution:

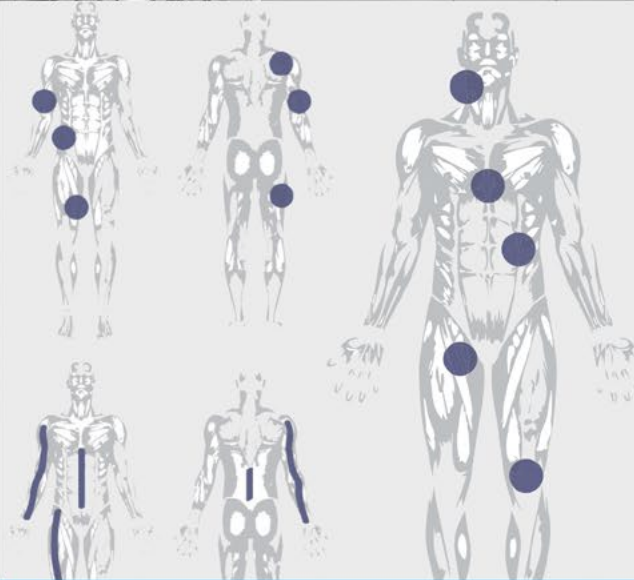
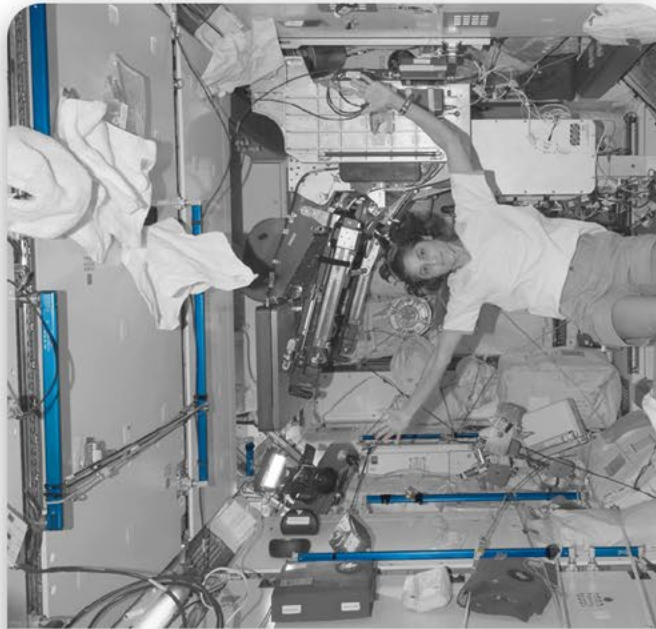
Research • Ideation • 3D Modeling (Rhino + Grasshopper) • Rendering

Vision

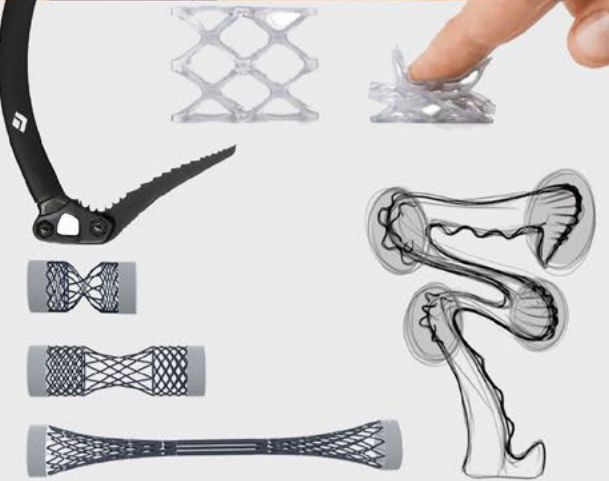
A shift of meaning for understanding sport in ISS context: from mandatory activity to flexible and enjoyable exercises, adding more possibilities to use.

Mission

A solution carefully designed to add variety and pleasure to training sessions in the ISS by focusing the muscles in a different way than the usual one and adding a relaxing meaning.



Analysis

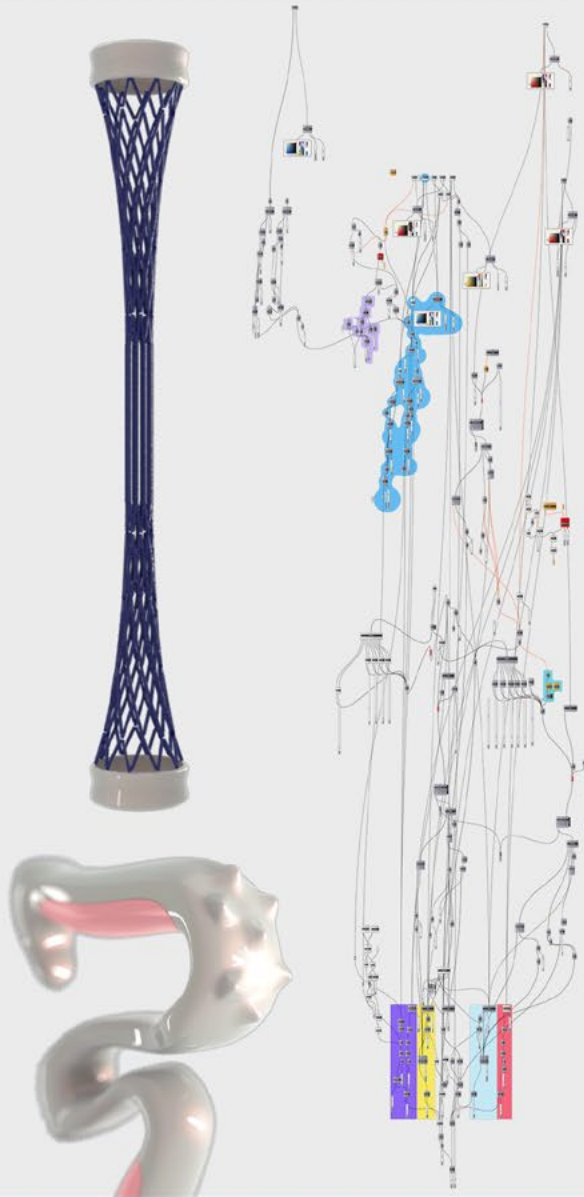


Exerity has some **bumps** which enhance the massage experience.

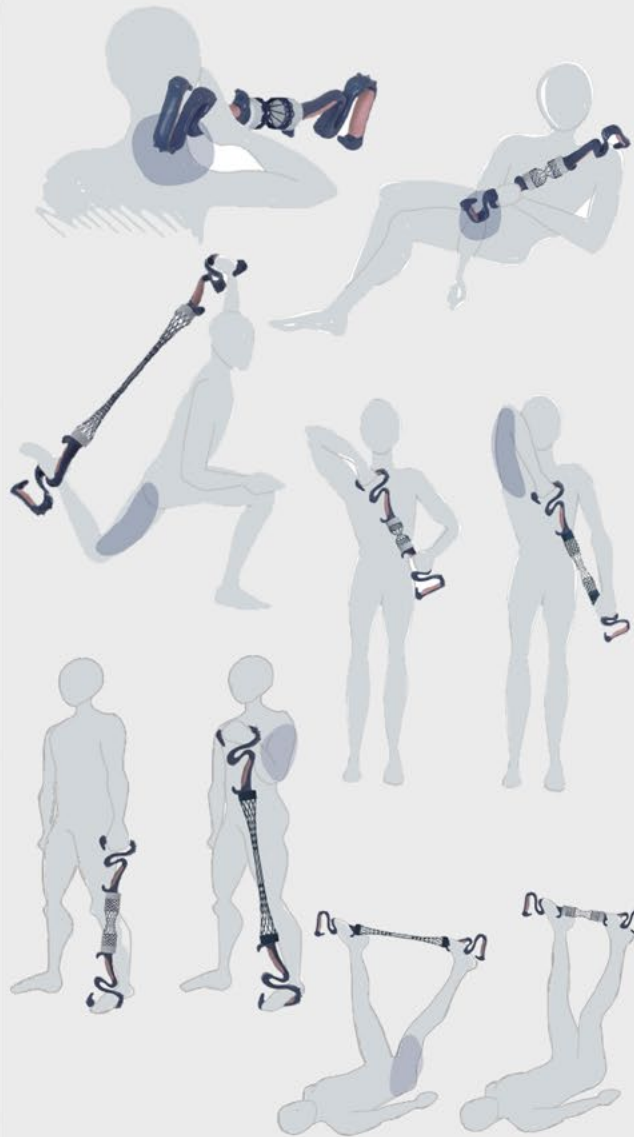
Hook shape Exerity gives it the ability to hold on bars in the space agency.

Inspired by the **auxetic structure**, we designed a shape composed of several filaments that enable the product to be twisted and extended.

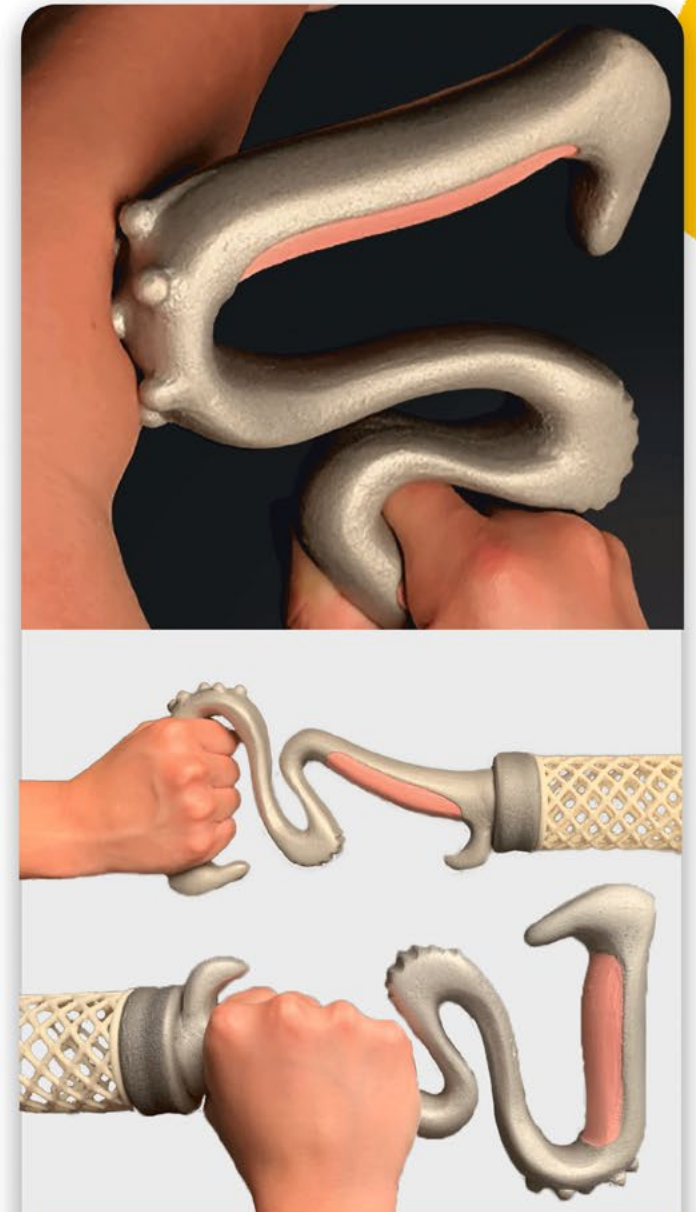
Inspiration & Idea



3D Model



Implimentation



Photoshoot

Blobby One

Soft and Minimal Clockface
for Fitbit smart watches

Farshad Saffari



My Contribution:
UI Design • Coding (Javascript, CSS)

Thank You

For more projects and to read about my design journey
please visit my website



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