UC Berkeley Mdes SP 21 Luna Zhiyue Wang

### **Zhiyue Wang**

l u n a w a n g z h i y u e . c o m UIUX | ARVR | Product Designer

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## R

### **EDUCATION**

### University of California, Berkeley

Jan.2021 – Dec.2022 | Berkeley, US Master of design, in the field of Engineering and Design Innovation

### University of Edinburgh

Aug.2016 - Jul. 2018 | Edinburgh, UK Master of Architecture and Landscape Architecture

### **DESIGN SKILLS**

Rapid Prototyping
Wireframing
Contextual Inquiry
Persona & Scenario
Concept Sketches
Storyboarding
Data Visualization
Responsive Design
User-Centered Design

### RESEARCH SKILLS

User Interview
Questionnaire
Affinity Diagrams
Heuristic Evaluation
Usability Testing
Competitor Analysis
Statistical Analysis

### **TOOLS**

Figma
Sketch
Adobe Creative Suite
Unity
Blender
Maya
3ds Max
Html5 & CSS3
C#
Python

### **EXPERIENCE**

### Lululemon | Product Design Intern

June 2021 – September 2021 | San Francisco, CA

Led the collaboration to research and design virtual fitting solutions to lower return rate

Researched 37 virtual try-on solutions in the fashion industry to find the

- optimal approach to upgrade the shopping experience for customers. Ideated 6 AR/VR fitting room products based on different virtual try-on
- technologies and the design principle of Lululemon.
   Presented 6 potential solutions with the evaluation on usability and market
- · acceptance.

### Moblize.IT | UIUX Design Intern

February 2021 - April 2021 | San Francisco, CA

Utilized analytical skills to fix user experience issues. Increased the popularity of an app through an effective and thorough redesign.

Analyzed and found solutions to existing user experience and usability issues of the Android game, Bad Chess.

- Utilized design tools including Adobe XD, Illustrator, and Figma to create
- prototypes and wireframes based on the given requirements and expectations.
- Achieved 10 times the downloads by redesigning the user flow, user
- interface, and typography of the game to make a more enjoyable user experience.

### Cfierce Co. Ltd. | Cofounder, UIUX Designer

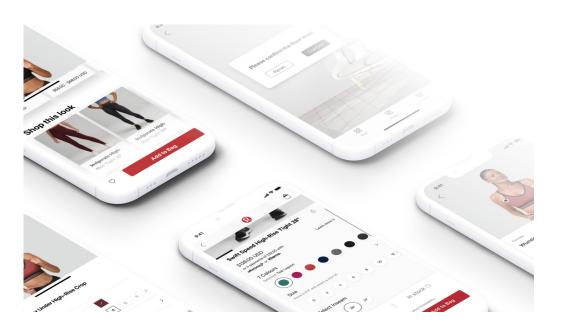
August 2018 - December 2020 | Guangzhou, China

Cofounded E-Commerce Fashion Brand Cfierce into a success by implementing user-friendly user experience and market strategies. Achieved continual improvements through reducing manufacturing times, updating brand identity, and utilizing social media.

Designed and implemented an innovative and user-friendly UI for the

- online shopping website based on user research, which achieved sales of \$32.2k USD within 6 months.
- Increased the average click-through rates by 12% from improving the
- products' advertisement content to fit the brand and consumer market.
   Effectively led marketing research and supply chain management which
- increased the business growth rate.
- Reached and maintained 174k brand followers in 10 months through key
- influencers advertising.
- Streamlined manufacturing process from 25 to 16 days for optimal
- business operations.

# Z O M H



### Mdes Design @ Large

Zhiyue Wang Yllin Niu Yu Cheng

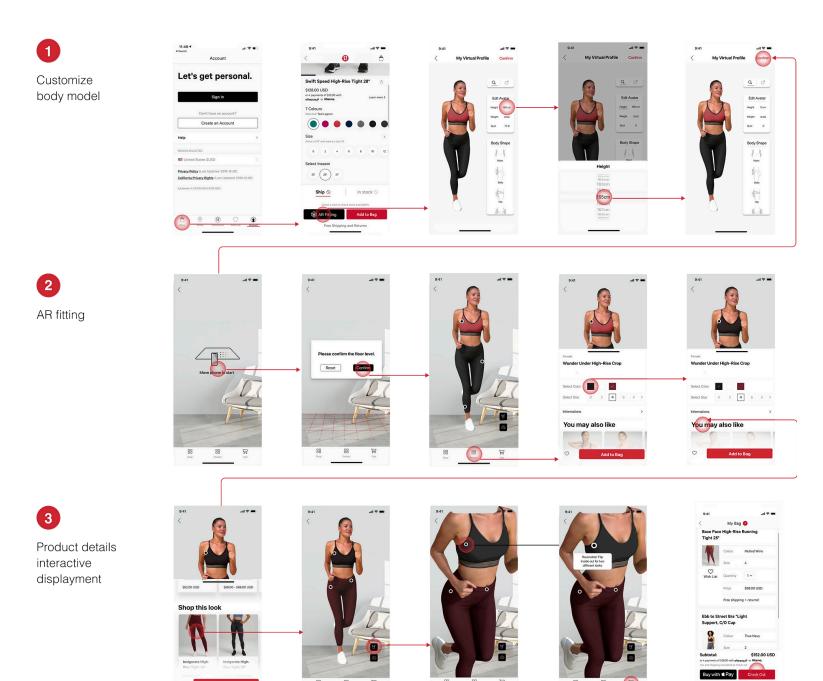
To solve the pain points of online clothing shopping, this project upgrades lululemon's online fitting efficiency of sizing and styling.

By integrating AR technology into the lululemon mobile App, this project streamlines the experience of fitting lululemon sportswear online.

### How can we improve the efficiency and experience of online product selection for Lululemon users?

Recently rapid rising labor costs, hotly discussed Meta Universe topics, the growth of major brands' online sales, and the Covid -19 epidemic have hinted that online shopping has become an unstoppable trend.

However, online clothing shopping still faces high return rates caused by improper sizing, unimaginable materials, etc. Lululemon, as a well-known sportswear company with a brand image for tailoring fit, comfortable fabrics, and innovative attitudes, reimagining its online shopping experience is challenging and promising. We kept the original look and feel of Lululemon but only focused on optimizing one specific experience - online fitting.



# VIRTUAL TRY-ON

By integrating AR technology into the lululemon mobile App, this project streamlines the experience of fitting lululemon sportswear online.



Berkeley @ Mdes Designing Emerging Technologies

Zhiyue Wang Yu Cheng Yiying Wu Peipei Lin

'Stage X' is an AR immersive event designed for the tourists and local communities to experience the beauty of San Francisco.

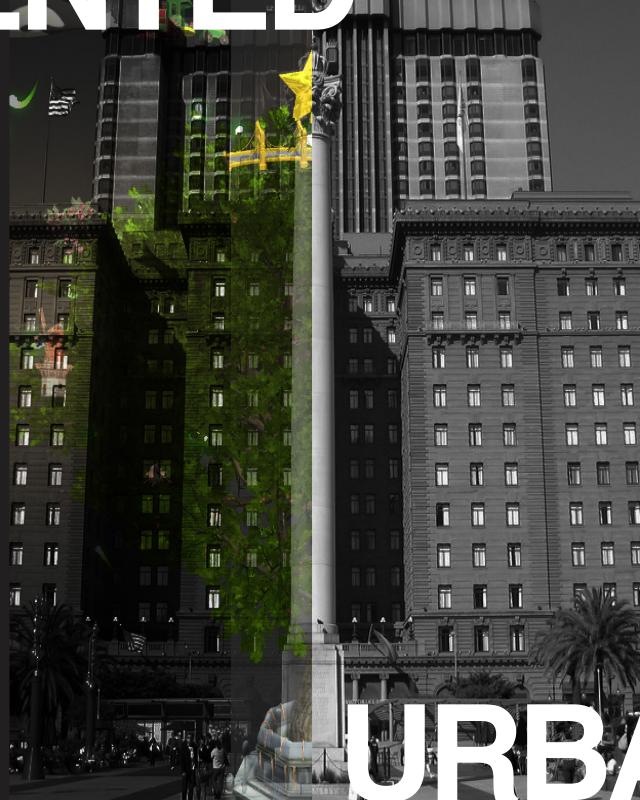
By interacting and scanning the cut-up pieces of the SF map placed on the tiles, a corresponding landmark model and a sound effect will appear. After the audience has completed their scanning tour, they will be randomly awarded a landmark model (like opening a mystery box) together with the compiled music of their journey as souvenirs.

Next, the participants or audiences can scan the Dewey monument to discover what others received. It will show up like a tree with all the awards hanging on it when scanning. At the end of this journey, guests can take a photo with the virtual SF tree and share it with their friends or social media to commemorate this event.

### AUGINE LE

We have three main function buttons on the home-page that redirect users t Sounds of SF, Mystery Box, and SF Tree functions. We use UGUI to enable controls that allow users to turn off and return to the main page at any time.

SF sound is the first step in the user journey. We built a database of 16 maps representing 16 different parts of San Francisco cultures through Vuforia. Each map will identify its corresponding models and sounds. When the user scans one or more images, it will produce rich visual and auditory effects. Some parts of the sounds are collected locally in San Francisco.



After playing with SF models, the user will randomly get one of the 16 models as a reward by clicking the finish button. The user needs to hold the iPad to find it around. Users could use two fingers to zoom in/out the model and use one finger to rotate it.

We built a 1:1 monument model of union square on the SF Tree page and put it into Vuforia for training. When the tablet recognizes the monument, it will virtually grow a tree model representing the Tree of the SF Culture.

IN LIFE





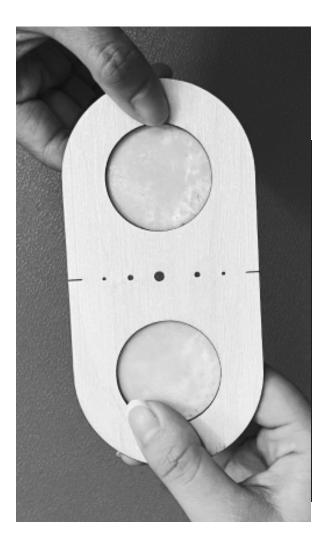


### **IMPLEMENTATION**

This AR application was built by Vuforia SDK and interacted by using gestures. There are four main scenes, which are connected through Unity's UGUI management. We used Vufuria's image target and model target functions as the two main interactive pages.

We also embedded some independent functions in these two modules, including gesture interaction, model customization, camera functions, etc. to enhance the fluency of the entire application and enrich the user experience.





Designing Emerging Technologies Provocation 03 The Body

Zhiyue Luna Wang Yu Cheng Susanne Pierce Maddux Georgios Grigoriadis

Human touch is crucial. It's social glue, it's our wellbeing.

Touch and physical contact by a trusted person has a positive effect on the healing process. Our sensation of pain is reduced when someone we care about holds our hand. And our immune systems also respond quite intensely to touch.

But as our lifestyles become ever more transient and reliant on digital tools, these simple interactions are under threat. That is the reason why we designed SOMA- a wearable device, shared by two people. soma's two way communication of subtle outputs of warmth, vibration and light is designed to foster therapeutic remote physical communication of care and empathy. soma's experimental and revolutionary two way haptic communication mode is designed to provoke a positive psychological response of well being and support between two people that transcends the act of texting.

Much like texting and emojis, soma sets the stage for the development of user generated haptic communication vocabularies.

### Form 1

Silicone cover



Electronic component base

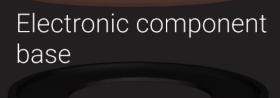


### Form 2

Supporting structure



Silicone cover

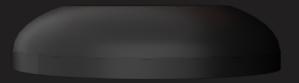


### Form 3

Silicone cover



Supporting structure

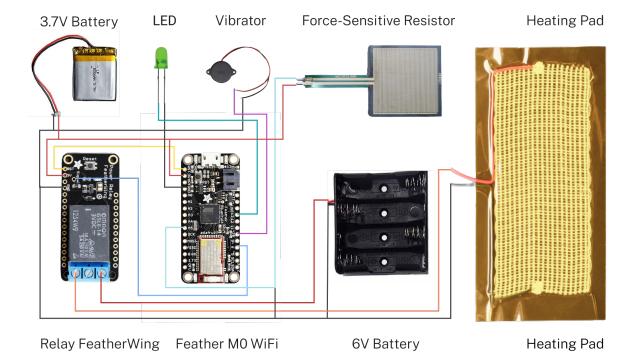


Electronic component base

We redesigned the prototype based on the feed back from #1 Prototype, and chosed Form 2 as the final prototype. Its frame-shaped support structure allows the silicone to have more contact area while avoiding excessive squeezing and causing the silicone to fail to rebound. Therefore, the user can squeeze and press the prototype surface within a controllable range. The hollow at the bottom allows better heat transfer of the heating pad.

### **IMPLEMENTATION**

We chose LED lights, vibrators, and heating pads controlled by relays as feedback components through experiments and iterations. The Force sensitive resistor that can detect pressure and deformation is selected as the input element for circuit design.





### **Mdes Design Studio Zhiyue Wang**

Losing is universal, but approaches to dealing with grief after losing a loved one may vary. Mixed reality technology shows new possibilities for grief healing. It provides users with an immersive sensory experience, including visual, hearing, sense of time and space, etc. These sensory illusion caused by VR/AR technology has proved their potential in physical rehabilitation, PTSD therapy, bipolar disorder healing, and other mental healing cases.

The project wanted to explore the potential of using mixed reality technology as a tool to heal emotional trauma by focusing on the scenario of losing pets. Targeting the users who lost or separated from their pets, this project aims to use the virtual environment to arouse positive emotions and help them heal from sorrow and grief.



Petopia is designed in two parts: the gamification mobile App and an Oculus VR environment. According to Rando's 6R grief therapy process, the user would be required to complete the corresponding five game levels in the mobile application. After going through the whole game level, which means finishing a therapy process, users would finally reach the VR platform - Petopia. In the VR environment, users would be able to see the happy afterlife of their beloved pets and finally let go of their sorrow.

From film to existing technology, virtual technology to reconstruct the image of life is a cliché. Including consciousness uploading, brain-computer interface, emotional computing, etc., the ethical dilemma brought by technical triggered emotional resonance is an unavoidable topic. This project will avoid sending users into the vortex of painful memories. Instead, the design will focus on strengthening and generating positive memories. In addition, one of the essential factors in reconstructing the incarnation is to establish the similarity of personality traits, which is one of the optimization directions for future study.

Grief healing for losing pets as a starting point, Petopia attempts to explore how technology can intervene in human emotions and positively impact, thereby inspiring how could mixed reality technology helps people recover from grief or separation anxiety.







