





#### aidentufts22@gmail.com



Product Designer | Design Researcher

### **EDUCATION**

### Tufts University Medford, MA

Bachelor of Science, Double Major in Cognitive Brain Sciences and Architectural Studies

 GPA
 3.93/4.0

 Graduation
 May 2022

**Honors** Dean's List all semesters; Psi Chi International Honor Society in Psychology

Honors Thesis The Effects of Anthropomorphic Design Features on Perceived

Anthropomorphism, Agency, and Trust in HRI

**Relevant Coursework** Human-Computer Interaction, Human-Robot Interaction, Industrial Design,

Human Factor Product Design, Computer-Aided Design, Web Programming, Architectural Design, Intro to Machine Learning, Stats for Behavioral Science

### **RESEARCH**

### Tufts Human-Robot Interaction Lab Medford, MA

2021.06 - Present

#### Research Assistant

- Examining how different anthropomorphic design features (e.g., appearance, communication style, language content) of robots affect people's perception of anthropormophism, agency, and trust by building virtually simulated prototypes for the senior honors thesis
- Assisting IRB protocol preparation and study design
- Worked as a summer intern to create Unity keyframe animations for virtual reality experiments where human subjects rate their level of trust towards a robotic agent that carries out tasks in a warehouse environment
- Conducted a literature review on trust transfer and human expectations of robotic agent's capabilities in Human-Robot Interaction

## Tufts Spatial Cognition Lab Medford, MA

2021.03 - Present

#### Research Assistant

- Recruiting and running through research subjects in-person and online to examine the individual biases in visual change detection tasks by using Prolific and Gorilla
- Built an algorithm that automated the process of generating plots of the empirical data in R
- Conducted a literature review on the statistical distribution and the mechanism of individual hemispatial biases in different tasks (e.g. line bisection tasks)

### Tufts Human Computer Interaction Lab Medford, MA

2019.10 - 2021.09

### Research Assistant

- Led an art research project on designing and implementing an interactive installation that takes in a textual input from a user's speech and visualizes the emotional analyses as Rothkoesque color fields to establish an intimate relationship with the user by encouraging their own interpretation and framing of life events
- Designed and implemented the front-end of a brain-computer interface that computes user's engagement rate by using fNIRs data and adjusts video recommendations accordingly

## **PUBLICATION**

**Aiden Kang**, Liang Wang, Ziyu Zhou, Zhe Huang, and Robert J.K. Jacob. 2021. Affective Color Fields: Reimagining Rothkoesque Artwork as an Interactive Companion for Artistic Self-Expression. In *Proceedings of the 29th ACM International Conference on Multimedia (MM '21). Association for Computing Machinery*, New York, NY, USA, 1454–1455. DOI:https://doi.org/10.1145/3474085.3478545

#### **WORK**

## Minimap New York City, NY (Remote)

2020.05 - 2020.06

UX/UI Design Intern

- Designed a high-fidelity prototype of a social media mobile application that enables users to quickly create and share events to encourage social bonding for the post-COVID-19 era
- Conducted UX research methods such as Journey Map, Persona Modeling, Competitive Analysis, Interview, and Icon Usability Testing

# **Textbook Exchange Network**

Medford, MA

2020.01 - 2020.05

Front-End Engineer

- Designed and developed a front-end interface of an online platform where students can easily exchange their textbooks in HTML, CSS, JavaScript, and React.js
- Designed UX flow and UI of the administrators' website
- https://www.textbookexchangenetwork.com/

## **AWARD**

## **Tufts UI/UX Design Competition 2019**

2019.10

Winner of the UI/UX Competition (Tufts Polyhack)

- Designed a high-fidelity prototype of a mobile application that tracks users' emotions using a support vectors machine and HRV features extracted from ECG sensors in wearable devices and displays the history of user's experiences of emotions by mapping the emotion logs to specific locations with a map API
- · Conducted UX research methods such as card sorting, empathy map, and empathy interview

### **PROJECT**

#### **Text Sentiment Classifier**

Machine Learning Engineer

- Developed machine learning algorithms in Python that preprocess text reviews and classify positive and negative sentiments for a project in Introduction to Machine Learning class
- Achieved a balanced accuracy rate of 0.842

## **Futuristic Kahoot**

**UX** Engineer

- Created an alternative to an existing game-based learning system, Kahoot, for a group project in Object-Oriented Programming for Graphical User Interface class, using HTML, CSS, JavaScript, Webgazer.js, and jQuery that uses the data of users' eye gaze to select an answer choice
- $\bullet \ \ Conducted \ ideation \ sketching, \ wireframing, \ and \ quick \ prototyping \ to \ improve \ the \ usability$

## **LEADERSHIP**

## **Tufts Human Factors and Ergonomics Society**

2019.09 - 2021.01

Undergraduate Representative

• Collaborated with executive board members to organize design workshops, guest speaker events, field trips, and any other relevant events near Boston

## **SKILL**

Programming	Python	JavaScript	HTML/CSS	Java	React
	JSON	jQuery	C++	R	Node.js
Software	XD	Framer	Sketch	Github/Git	Rhino
	Illustrator	Figma	Photoshop	Babylon.js	Inventor
Method	Wireframing Prototyping	A/B Testing Card Sorting	Storyboarding Jouney Map	Questionnaire Usability Testing	Persona Interview