# Ruocen (Rachel) Liao

ruocenliao@gmail.com | (317) 970-1622

#### **EDUCATION**

## Carnegie Mellon University, Pittsburgh, PA

Bachelor of Arts Chemistry, Additional Major in Human Computer Interaction, Minor in Computer Science

GPA: 3.9/4.0

Dean's List High Honor: Fall 2019, Fall and Spring 2018 – 2019, Fall and Spring 2017-2018

Selected Coursework: Persuasive Design, Introduction to Computer System, Parallel and Sequential Data

Structure and Algorithms, Introduction to 3D Animation

#### PROJECT EXPERIENCE

## **Independent Study, CMU**

Pittsburgh, PA

Maker Entrepreneur User Research Project (in progress)

Sep 2020-Present

- Conducted background research on maker entrepreneurs, the maker's movement, and marketing strategies
- Continued to recruit and interview maker entrepreneurs to identify their technological needs

## Programmable User Interface, CMU

Pittsburgh, PA

"Bun Bun Bake Shop" Design (in progress)

Sep 2020-Present

- Designed a website for a local bakery store with delivery service targeting families with kids
- Used lo-fi paper prototype and hi-fi prototype in Figma to perform user tests and made optimizations accordingly
- Implemented the website in HTML/CSS3 & JavaScript

## **Interaction Design Studio, CMU**

Pittsburgh, PA

Individual project - Shall Make Shall Be: Call for Proposal Website

Aug 2020-Present

- Studied principles of web UI design-grid, color, information architecture
- Accomplished a process book to demonstrate learning process and created a UI prototype in Figma
- Currently working on the project of Interface Design for light

#### **User-Centered Research and Evaluation, CMU**

Pittsburgh, PA

*Group Project - ArTogether* 

Jan 2020-May 2020

- Proposed ArTogether: an interactive public art museum that enables a shared art experience online which aimed to increase the impact of public art on the livability of cities such as Pittsburgh
- Conducted user research via methods like contextual inquiry, affinity diagramming, think-aloud protocol and storyboard speed dating
- Generated insights based on background research and interview interpretation sessions
- Facilitated meetings and set agenda with teammates remotely during the pandemic

## Design Human Centered Software, CMU

Pittsburgh, PA

Group Project - Game Interface Optimization Design

Sep 2019-Oct 2019

- Revised the interface and functionality of a game to increase the speed of completion
- Wrote code in Java to create working prototype; used Processing for visualization
- Conducted user testing, brainstormed persistently and combined insights from team members; implemented and refined the prototype using the feedbacks accordingly
- Won the top three team of fastest average completion speed

Pacman, CMU Pittsburgh, PA Jul 2018

Game Programming Project

- Designed and implemented a fully functional game in Python in a week
- Optimized the game interface and made adjustments through user testing

## INTERNSHIP EXPERIENCE

Oracle Beijing, China

Solution Engineer Intern

Jul 2019-Aug 2019

- Analyzed sales data and compiled database by Autonomous Data Warehouse and Oracle Analytics Cloud
- Visualized data analysis results by generating graphs and put forward solutions for potential issues
- Designed meeting reports in PowerPoints for professionals in the department

#### **LEADERSHIP EXPERIENCE**

# Shotokan Karate Club, Carnegie Mellon University

Aug 2019 – Present

President

- Plan and manage club activities, practices and use of money
- Recruit new members and advocate for the club

#### **SKILLS**

Software: Figma, Mural, Miro, Tableau, PowerPoint, Oracle ADW, Oracle OAC, Mathematica, Maya, zBrush

Programming Languages: C, Python, HTML, CSS3, Javascript, Java, Standard ML

Languages: Chinese (Native Speaker), English (Fluent)