# **Haozhe Zhang**

zhz19980514@ufl.edu | (+86) 180-2650-9996 | github.com/rrrrr4788 linkedin.com/in/haozhe-zhang | haozhe-zhang.herokuapp.com

### **EDUCATION**

University of Florida, Hough Graduate School of Business *Master of Science in Management, Combined Degree* 

National Universities Ranking: 30 (US News 2020)

University of Florida, Herbert Wertheim College of Engineering

Bachelor of Science in Computer Science, Computer & Information Science & Engineering

Honors: cum laude, GPA 3.62/4.00

August 2016 – December 2020

**January 2020 – August 2021** 

August 2010 – December 2020

Gainesville, FL

Gainesville, FL

OS: Linux

#### TECHNICAL SKILLS

**Programming Languages and Game Engine:** JavaScript, Python, C++, JAVA, MATLAB, Unity **Web and Mobile Development:** HTML, CSS, React-Redux, React Native, Express, Node, Kivy

Databases: SQL, Mongo, Firebase

## CONSULTING ENGAGEMENT EXPERIENCE

Waste VR

**August 2019 – May 2020** 

Gainesville, Florida

Scrum Master

Managed day-to-day developmental progress and a team of 5 engineers on a Virtual Reality project sponsored by the company PTP Strategy via the UF Integrated Product and Process Design (IPPD) program.

- Oversaw and ensured consistent and accurate output of the sponsor's desired program under the Agile development pattern by collaborating with the programming team members, faculty coach, and liaison engineer.
- Developed a Virtual Reality application and a series of learning modules with Unity, targeted to the general public for education on recycling methods.
- Designed the Assessment/Quiz Scene of the program individually, involving scene construction and devising algorithms to complete quizzes, resulting in real-time feedback for users.

# **PROJECTS**

Humming April 2020 – September 2020

Designed and developed an Android application that provides users instant delivery services via drones and robots within San Fransisco (simulation) in the Agile development pattern.

- Engineered all 7 screens, which provide functionalities of user authentication, solution planning, order creation, status tracking, profile information modification, etc., with React Native and Firebase.
- Enhanced the user experience by implementing several React Native, Expo, and Google APIs such as polyline drawing, route computation, coordinate-address translation, and payment integration.
- Devised RESTful APIs to facilitate data exchange for order creation and management, payment information generation and validation, and address management via Firestore.

InMotion November 2019 – September 2020

Designed and developed a real-time web application that analyzes human facial expressions from webcam and video, sorts the emotion data into 7 categories, and displays the data with a visual diagram.

- Constructed the user authentication module with NodeJS, ExpressJS, Mongoose, and JWT, which stores and accesses the authentication token in cookies.
- Applied Firestore to store facial expression data collected from webcam and video uploaded every 100 frames, query, and retrieve the data for further facial expression analyses.

Poppy May 2020 – August 2020

Developed an Android application that reads medicine instructions and reminds users to take medicines.

- Created a task manager with Kivy and a SQL-stored reminder system by utilizing captured images of prescription instructions on bottles.
- Integrated the OCR (Optical Character Recognition) module on a Flask server hosted on Heroku to process pictures containing the medication instructions and program tasks in accordance with the information.

Devconnector December 2019 – January 2020

Developed and deployed a MERN stack social network media application that includes user authentication, profiles, and forum posts.

- Built an extensive backend API with Node.js & Express with routes protected by JWT and tested with Postman.
- Integrated React with the backend and managed the application states with Redux, resulting in a fast and clean workflow.

# RESEARCH

Minetest September 2020 – December 2020

Investigated how to speed up the build process and generate correct WASM file outputs for a Minecraft game engine.

#### **Human-Robot Interaction Research Lab**

January 2020 – May 2020

Participated in a project exploring the lower body, post-op rehabilitation through VR capabilities, and explored mobile applications as base platforms with ease of access.

- Investigated the use of smartphone IMU sensors to collect user motion data, involving data extraction and visualization.
- Connected the Xsens model with Unity and developed a VR warehouse environment in order to construct a virtual experiment environment that manages different human-robotic interaction tasks, without the pilot being exposed to potential hazards.