# **HSU, SHENG-WEI "RICHARD"**

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#### **EDUCATION**

University of California, Irvine

B.S. in Computer Science

Deans Honor List (2016 Fall – 2020 Spring)

#### **Expected Graduation, June 2020**

GPA: 3.925/4.00

Major GPA: 3.963/4.00

#### **Relevant Courses**

Data Structure Implementation & Analysis, Algorithms Design & Analysis, Artificial Intelligence, Machine Learning & Data Mining, Graphical Models & Algorithms, Computer Visions, Data Management, Information Retrieval, Next Gen Search Systems

#### **SKILLS SUMMARY**

- Programming Languages: Python, Java, C#, C++, React Native, JavaScript, HTML, CSS, Swift, Visual Basic, Unix, MySQL
- Languages: Fluent in English & Chinese

## **EXPERIENCE**

#### Advanced Communication Technology & Solutions - Intern

July 1, 2019 – August 30, 2019

- Programmed bash script and packaged dependencies into Docker images to perform offline server deployment.
- Researched into neural networks, and developed a fullstack web app that trains and infers text from hand-written words.
  - o Resources utilized include TensorFlow, Flask, HTML, CSS, JavaScript, ELK, MetricBeat.
- Trained and taught around 20 coworkers in a workshop on Introduction to AI and Neural Networks.

#### **PROJECTS**

## Wander - React Native, JavaScript, GitFlow, JSON-Server

June 22, 2020 - Present

- Implemented React Native functional components, such as useState, useEffect, FlatList, and custom components.
- Coordinated with other team members using GitFlow branching model.

#### SugoiFridge - Swift, Spoonacular API, Alamofire, Parse, SwiftyJSON

March 2020

- Queried Spoonacular API with Alamofire POST requests to search for grocery ingredients.
- Connected to Parse database to create and update groceries ingredients in a user's fridge.
- Implemented UISearchBar, UITableView, auto-layout constraints, and image caching with AlamofireImage.

# Where2Meet - Docker, Python, Flask, Google Maps API

January 31, 2020 – February 2, 2020

- Built and deployed a Docker image for Python Flask server on AWS.
- Created API endpoints for mobile client to communicate with AWS and MySOL database.
- Stored, modified, deleted, and retrieved each user's hangout preferences using a MySQL database on AWS.
- Queried Google Maps API for nearby hangout locations based on user's preference.
- Ranked and displayed possible hangout location for the group based on each user's preferences.

# GOTOLockers - Android Studio, Java, AWS, Google Maps API

February, 2019 - April, 2019

- Software engineer and frontend Android developer for competition hosted by UCI's Paul Merage School of Business.
- Implemented Google MapView for lockers located near the user's position with custom markers.
- Requested server to update user's container reservation, and display ListView of available containers at each locker location.
- Remotely unlock and lock containers using server API endpoint requests.

#### ZotSleep - Android Studio, Java

January 2, 2019 - March 20, 2019

- Developed Android application that suggests to users when to sleep and wake up to feel less groggy during the day.
- Enabled background service to detect user's heart rate using Android Wear's PPG sensor.
- Continuously sent user's heart rate data to server, and receive suggestions from server for when the user should wake up.
- Utilized Android Wear's GPS location to detect when users leave their home for work and make better suggestions.

## LA Parking – Android Studio, Java, Google Maps API

March 30, 2018 - April 1, 2018

- Developed an Android app helping users find the nearest, available, and cheapest parking spots.
- Utilized LA City parking lot dataset and Google Maps API.