

GAVI RAWSON

914 - 560 - 6688
gavirawson@gmail.com
www.gavirawson.com

Python

HTML / CSS

Node.js

UI/UX

SQL / NoSQL

Javascript

Swift / Obj-C

REST

Illustrator

AR / VR

EDUCATION

COLUMBIA UNIVERSITY

M.S. in Computer Science • Vision, Graphics, Interaction, and Robotics Track • Expected December 2018

JOHNS HOPKINS UNIVERSITY

B.S. in Computer Science and Cognitive Science • May 2017 • 2 Dean's List Awards

RELEVANT COURSEWORK

Machine Learning, Computer Vision, Natural Language Processing, Artificial Intelligence, Computer Graphics, Parallel Programming, Intro to Databases, Humanoid Robotics, 3D UI and Augmented Reality, UI and Mobile Applications, Graphic Design

EXPERIENCE

COLUMBIA ROBOTICS LAB • *Software Engineer* • 9/17 - Present

- Implemented website from scratch allowing spinal cord injury patients to interface with robotic arms to accomplish grasping tasks. Built with Node.js, Express, RequireJS, and Mustache.
- Utilized ROS to write controllers, enabling input devices such as Alexa, sEMG, and binary switch to communicate with the interface.
- Built Unity/ROS system that controls Fetch humanoid robot from virtual reality. Worked with Fetch controllers and MoveIt! to solve inverse kinematics problems for gripper and wheel movements.

APPLE INC. • *Software Engineer Intern, Health Special Projects* • 6/17 - 8/17

- Extended CareKit to support dynamic activities, encouragements, and reward system, enhancing provider-patient communication.
- Built end-to-end gaze detection app utilizing CoreML. Distributed app to 20 employees and collected data to improve CoreML models.
- Crafted 60-screen storyboard for the Apple Watch + iPhone feature. Structured UX and script to comply with FDA regulation and data collected on customer concern and preference.

CORRIE HEALTH • *Lead iOS Developer* • 6/16 - 10/16

- Collaborated on-site with Apple Inc. Presented app to COO Jeff Williams, VP of Health, and Health Special Projects lead.
- Wireframed and programmed first cardiac CareKit app aimed at reducing hospital readmissions.
- Delegated tasks to iOS development team and reviewed all written code before merging.
- Reduced readmission rate to zero for 50 participating patients at the Johns Hopkins Hospital and Bayview Medical Center.

RESEARCH CONNECTION • *Full Stack Web Developer Intern* • 6/15 - 8/15

- Taught self web development and built user dashboard and search system.
- Improved website's SEO and ultimately achieved Google Sitelinks.
- Initiated company policy for documenting code to facilitate onboarding process.

PROJECTS

CULTURE SHOCK

- Manage day-to-day software development and technology operations of a startup working to create an iOS app that allows users to note, discuss, recommend and enjoy TV, books, and podcasts with peers.
- Produced wireframes of 40 screens for initial concept using Adobe CC. Performed user surveys to iterate and optimize user experience.
- Spearheaded development of fullstack application for iOS. Frontend developed with Swift using MVC pattern and modular views. Backend REST API built with MySQL/Flask and communicates with client through JSON.
- Actively recruit and manage new developers to help our team continuously improve the app's capability and functionality.

AR RECIPE ASSISTANT

- Built AR application that guides users through the process of creating a recipe. Deployed on iOS and Android using C#/Unity.
- Through an egocentric AR interface, users can select recipes, view ingredients, watch guided videos, set timers, and take photos.

MAVI IOS APP • *JHU Hackathon*

- Built crosswalk and crowd detector app designed to aid blind persons within 48-hour time constraint (Awarded Best Health Project at JHU Hackathon and Top 10 Overall)
- Utilized iOS Client, Flask backend, Haar and Cascading classifiers for crosswalk detection, and Microsoft's Emotion API for crowd and emotion detection.