

Peiyao Rachel Chen

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SKILLS

Languages: JavaScript, TypeScript, Swift, Kotlin, Java, HTML, CSS

Technologies: React, Redux, iOS, RxSwift, Node.js, MobX, Android, Firebase, Jest, XCTest, JUnit, Mockito

Tools: Git, Postman, Firebase Analytics, Sketch

EXPERIENCE

Honeywell

Software Engineer

Jan 2019 – April 2019

Atlanta, GA

- Led development of an aircraft fuel calculator feature for GoDirect, Honeywell's upcoming flight planning web app, and implemented the first iteration in **React/Redux** and **HTML/CSS** complete with unit tests
- Contributed in defining the front-end architecture and tech stack from prototype to production for GoDirect
- Migrated from existing **TypeScript** frontend with **MobX**, to a **JavaScript** front-end using **PropTypes** and **Redux** to improve state management architecture, render performance and code organization
- Delivered UI features aimed at improving user experience such as parameterized flight optimization, and transition waypoint specification

North (Thalnic Labs)

Mobile Developer

May 2018 – Aug 2018

Kitchener, ON

- Designed an analytics framework to gather metrics on **Bluetooth Classic** and **Bluetooth Low Energy** connection stability between Focals smart glasses and its app, using **Swift** and **Firebase Analytics**
- Refactored Bluetooth connection recovery methods resulting in a 20% reduction in connection failures
- Developed a calendar feature on **iOS** for Focals' companion app using **EventKit** and **Swift** which exposed event attendee information to the glasses, complete with unit and integration tests
- Improved code reusability by programmatically creating UI using **RxSwift** and **MVVM** architecture
- Constructed an **Android** user activity feature in **Kotlin** that tracked beta users' daily Focals app usage

Manulife RED Lab

Solutions Prototype Developer

Sept 2017 – Dec 2017

Kitchener, ON

- Architected the first in-market Alexa insurance skill, Manulife Benefits, using **Node.js** and **AWS Lambda**
- Implemented an authentication server hosted on **Pivotal Cloud Foundry** using **Node.js** and **Express.js**
- Developed a recruitment **iOS** app with **Swift** and **Firebase** that was used by 100+ Manulife job applicants
- Conducted 10+ user interviews to refine Manulife Benefits, improving its NPS score by 30%
- Created responsive, web accessible login pages using **HTML**, **CSS**, and **JavaScript**

PROJECTS & ACTIVITIES

Blueprint

Project Developer

May 2019 – Present

Waterloo, ON

Developing mobile and web applications for social good to help non-profit organizations succeed

Computer Vision Piping Instrumentation Diagram

Honeywell Intern Project Week

April 2019

Atlanta, GA

Built a schematic classifier using **Python** that identifies instruments on a piping instrumentation diagram and labels them. Generated a data set using **OpenCV** to train a **neural network** which was used for classification

Manulife SWIM

1st Place, Manulife Co-op Innovation Challenge

Aug 2017

Kitchener, ON

Designed and created an **iOS** app that uses peer-to-peer lending to provide users affordable private health care

EDUCATION

University of Waterloo, Honours Computer Engineering

Candidate for Bachelor of Applied Science, GPA 88%

Dean's Honours List Fall 2016, Spring 2017, Winter 2018

Sep 2016 – Present
Expected Graduation in 2021