# HENRY ZHANG

# Skills Summary

- Languages: JavaScript, C++, C, Python, Java, HTML5, CSS, Bash
- Technologies: Firebase, MongoDB Atlas, Express.js, Vue.js, React, Gatsby, jQuery, Node.js, git, REST API, Linux
- Experienced with Cloud Databases, Object-Oriented Programming, UI Design, Software Design

# Work Experience

## University of Waterloo | Faculty of Engineering

Waterloo, ON

Software Developer (Secure File Sharing) / Advisor

May 2021 – December 2021

- Tech Stack: Express, Firebase, Google Drive API, Microsoft Graph API, Twilio Authy, Microsoft Azure, NodeJS
- Developed account maintenance features (changing password, phone number, security questions, removing account) and a spreadsheet feature detailing files the logged in user had access to for the Secure File Sharing app.
- Increased Security by adding MFA with SMS (Twilio Authy), encrypted Security Questions/Answers, randomized initialization vector for AES encryption (for files) and an account locking system for suspicious behaviour.
- Ported the Secure File Sharing app from Google Drive to Microsoft OneDrive using Microsoft Graph API.
- Significantly reduced friction (shortened user flow to encrypt and decrypt files by 42%)
- Earned "Outstanding" rating on co-op evaluation and rehired as part-time advisor to fall term co-op students.

Radiius Toronto, ON

Full-Stack Developer/Co-founder (Volunteer Position)

May 2020 - December 2020

- Tech Stack: Vue.js, Firebase (Authentication, Storage, database), Node.js, JavaScript, git
- Developed a web-based business dashboard for a customer service/review app, using Vue.js to develop the front end, and using Firebase storage and Firestore to store user data/images

# **Projects**

#### **FilePass**

#### https://myfilepass.herokuapp.com/index.html

- Tech Stack: Firebase Storage, Node.js, REST API, JavaScript, HTML5, CSS3, git, Node.js
- Developed a file sharing service designed around user convenience and accessibility by using randomly generated 6-digit codes as keys to download files shared by other users.

#### CourierU

## https://courieru.herokuapp.com/index.html

- Tech Stack: MongoDB Atlas, Bootstrap, Mapbox, Radar.io, JavaScript, git, Node.js
- Developed a service for foodbanks to coordinate deliveries to those in need during the COVID-19 Pandemic by receiving requests and then mapping out efficient delivery routes for drivers.
- Featured in the MLH blog: <a href="https://stories.mlh.io/5-awesome-hacks-you-can-make-with-radar-1b3f76dc7ea9">https://stories.mlh.io/5-awesome-hacks-you-can-make-with-radar-1b3f76dc7ea9</a>

#### **Success Stories of New Canadians**

## https://immigrant-success-canada.netlify.app/

- Tech Stack: React, Gatsby, jQuery, Netlify CMS, Node.js, JavaScript, git, Node.js
- Developed a blog site with responsive and mobile-friendly UI showcasing the stories of Canadian Immigrants as part of a competition in which my team won second place.
- Utilized server-side rendering with Gatsby to load pages faster

## Education

#### **University of Waterloo**

Candidate for Bachelor of Computer Science (Co-op)

September 2020 – Present

# Awards and Certifications

- NSERC Undergraduate Student Research Award (2021)
- Google Cloud Platform: Essentials (2019)