Martin Au-Yeung

Vancouver, British Columbia, Canada • (778) 952-9021 • martin.auyeung1@gmail.com
https://martinauyeung.com • https://www.linkedin.com/in/martinauyeung/ • https://github.com/Foamyseal

EDUCATION

University of British Columbia – **BSc. Combined Major in Computer Science** **Expected Graduation: Nov 2022**

Discipline Focus: Computer Science, Life Sciences, Earth & Ocean Sciences – switched from Biology degree in Jan 2020

Relevant Courses: Data Structures & Algorithms (C++), Software Construction (Java), Computer Systems (C & Assembly)

SKILLS

Programming Languages: TypeScript, JavaScript, Python, Java, Dart, C++, C

Tools and Frameworks: React (HTML/CSS), NodeJS (Express, Passport), MySQL, Firebase (NoSQL), Flutter, GCP, AWS

WORK EXPERIENCE

BlackBerry — Fall 2021

Incoming Software Engineer Intern — **Remote - Waterloo, Ontario, Canada**

- Will be working on the IPG Cloud Infrastructure and Automation Team to migrate Ruby on Rails system to Go

Hölmetrics — May 2021 – Present

Software Engineer Intern — **Remote - Calgary, AB, Canada**

- Architecting SSO authentication system using SAML 2.0 with JIT provisioning to save login time by 120%
- Developed React dashboard to display employee wellness metrics as a first iteration demo by my 3rd week
- Developed question limit feature and progress tracking for wellness app to first major customers in my 1st week

PERSONAL PROJECTS

hubble — DubHacks 2020 (October 2020) – Present

Awards: Top 3 Best in Show Project @ Google Cloud Demo Week • Google Cloud COVID-19 Hackathon Fund

- Leading team of 5 in developing a full-stack, social connection app for Android and iOS using Google Cloud
- Designed and built a serverless data scoring algorithm to suggest compatible friends using NLP entity analysis
- Ideated UI and built Flutter front-end with friend connection and messaging system including Spotify integration
- Implemented data caching solutions discussed with my Google SWE mentor to save usage costs by 200%
- Demo: https://youtu.be/-GaKWMUCaaM?t=4511 Event Link: https://goo.gle/GoogleCloudDemoWeek

Research Paper - ML-based Predictive Modeling of COVID-19 Vaccination Uptake in the US — June 2021 – Present

Awards: Hoffmann-La Roche Research Solution Awards – 3rd Prize ($400)

- Implemented XGBoost ML algorithm to predict maximum COVID-19 vaccination uptake with 59% test accuracy
- Generated choropleths to highlight vaccination rates and discovered sociodemographic factors driving uptake
- Working closely with a York University professor to prepare manuscript for potential publication in a journal

minecraft-sisters — January 2021

- Created Discord bot to issue commands to Google Cloud Compute Engine hosted Minecraft server
- Automated server deployment and shutdown, decreasing time to start/stop by 9000% (3 min to 2 seconds)
- Expanded the ability for 200 users to issue server commands, saving GCP costs & allowing on-demand start/stop

Statstify — August 2020

- Created an interactive React web-app to present Spotify users listening statistics to peak 120 monthly users
- Devised and developed individualized recommendation algorithm to suggest "throwback" songs to users
- Implemented features to allow users to create playlists based on displayed statistics and share them on socials

COMMUNITY EXPERIENCE

Web Developer — July 2020 – May 2021

UBC Science Undergraduate Society — ***Vancouver, BC, Canada***

- Ideated and redesigned Society's webpage UI for better accessibility to 8300+ UBC Science students in 2019
- Took personal initiative to lead development of a React framework transition (Frontity) on society's existing WordPress site, decreasing site loading times by 500% (10 seconds to 2 seconds)
- Implemented Security Headers in PHP and migrated site to HTTPS to increase site security grade from a D to a B

Robotics Mentor — February 2020

The Code Initiative — ***Vancouver, BC, Canada***

- Taught 24 elementary students basic OOP concepts and function calls to move Sphero robot around obstacles
- Inspired students to pursue coding as a field of study by explaining personal experiences in why I switched to CS