**Martin Au-Yeung**

Vancouver, British Columbia, Canada • (778) 952-9021 • [martin.auyeung1@gmail.com](mailto:martin.auyeung1@gmail.com)

<https://martinauyeung.com> • <https://www.linkedin.com/in/martinauyeung/> • <https://github.com/Foamyseal>

**EDUCATION**

**University of British Col****umbia** – **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