



Skills & Interests

- Languages: Java, Python, Golang, C/C++, SQL, JavaScript, TypeScript, HTML & CSS, Terraform/OpenTofu
- Libraries & Frameworks: Gradle, JUnit, Pytest, Selenium WebDriver, Flask, React, Cypress, MUI, Hugo, REST APIs
- Tools: Git, SSH, Linux, Docker, Artifactory, Kubernetes, Jenkins, GitHub Actions, Atlassian Suite, Grafana, Postman
- Interests: Landscape Photography (5 yrs), Drones (Advanced License), Cycling (2500 km/yr), Travelling (8 countries)

Education

University of British Columbia

Expected May 2026

Bachelor of Applied Science - Computer Engineering

Dean's Honour List - CGPA: 87.4% | 3.8 / 4.0

Awards: UBC Presidential Scholars Award (\$40,000), ECE Undergraduate Scholarship (\$2,500)

Experience

D-Wave Quantum DevOps Co-op

May 2023 - Sep 2023

- Burnaby, BC • Implemented a new Kubernetes-based development platform utilizing Terraform to automate setup and define infrastructure as code, simplifying programming environments for over 80 individuals and boosting efficiency by 20%
- Overhauled the build and publication process of company Docker images by creating a Jenkins function that runs builds in the on-premises Kubernetes cluster, reducing work required by 95% and eliminating previous cloud costs
- Centralized company Docker images in a single repository that automated all build, testing, and publishing steps with only 6 lines of configuration per image, eliminating redundant Jenkins pipelines and improving overall organization
- Developed Grafana dashboards integrated with Prometheus metrics, enabling real-time monitoring of service health and key statistics, resulting in improved visibility and informed decision-making
- Pioneered a Terraform provider template in Golang which allowed multiple internal providers to be created and automatically deployed to Artifactory for general use

UBC Uncrewed Aircraft Systems, Student Design Team Captain

Sep 2021 – Present Vancouver, BC

- Revamped the team website using an opensource Go framework (Hugo) to decrease load times from 10s to 0.7s
- Increased team documentation and task tracking by over 5x after integrating Jira and Confluence into our workflows

Software Co-Lead

 Improved the cross-platform compatibility of our simulation software with Docker containers and made multiple GitHub Actions workflows to eliminate manual builds and deployments

Software Developer

- Implemented a command relay that wirelessly sent serial signals to an Arduino and our flight controller (ACOM)
- Reduced image streaming latency from 12s to 1s with a shell script running on an onboard Linux microcomputer

Projects

3FA - Multi-Factor Authentication System (GitHub, Demo Video)

- Created a backend API in Python using Flask and SQLite with over 20 endpoints to authenticate users and serve files
- Designed and implemented the authentication flow which included session and authentication tokens, encrypted communications, hashed passwords, and automatic timeouts to meet OWASP security standards
- Reduced manual work by 7x with GitHub workflows to automate testing for all parts of the system, create app releases and executables, package the backend as a Docker image, and automated dependency updates
- Used Pytest to achieve 98% line and branch coverage as well as set up Postman to improve manual testing

Multi-Client Server (Description), CPEN 221

- Constructed a Java server supporting multiple simultaneous clients capable of interacting and fetching Twitter data
- Enabled dual-server routing so that either server can be connected to and no interruptions occur if one goes offline
- Followed security protocols by hashing and salting all passwords and encrypting incoming and outgoing data via AES

SSC Scripts (GitHub), University of British Columbia

- Automated checking of UBC's Student Service Center for new information such as grades to save students' time
- Gained experience with Selenium's WebDriver in Python, allowing for the automation of any browser task