

## WORK EXPERIENCE

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### Software Applications Engineer II @ HP Vancouver

June 2022 – Present

- Built several **Node.js microservices**, exposing their own **REST APIs** to serve 10000+ customers on a SaaS management plane for remote desktops.
- Engineered a custom Kubernetes operator to dynamically scale globally available remote desktop tunnelling "gateways" on demand based on a bespoke **PID** algorithm and **Kubernetes CRDs**.
- Maintained Infrastructure-as-Code written with **Terraform**, **Helm** and **JSONnet** to deploy and manage Dockerized microservices on **Azure Kubernetes Service**.
- Architected new systems and coordinated multiple development teams to ensure features were delivered during the expected cadence, according to **SAFe** methodologies.
- Participated in recurring weekly **on-call shifts**, monitoring and resolving any production issues that arise, ensuring the system maintains the **SLA** boundaries of **99.99% uptime**.
- Conducted weekly reviews of security, compliance, and vulnerabilities affecting the system, mitigating them as required while working towards **SOC2** compliance.
- Automated legacy customer support processes that improved incident response time by ~75% and simplified and documented the process to be customer-friendly.

### Full-Stack Programmer @ UBC

April 2020 – April 2022

- Developed a holistic extra-credit website using **Angular** and **Django REST Framework**, adhering to Agile and Scrum development processes, that was to be used by 100+ first-year students.
- Increased productivity of unit test generation by ~393% (\$55,000 saved in salary costs) by creating a domain-specific open-source JUnit5 Testing library.

## EDUCATION

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### University of British Columbia

B.A. Hons. in Computer Science | **GPA: 94.8%**

**Awards:** Head of Graduating Class Medal for highest GPA in the faculty. Over \$150K total received from the International Major Entrance Scholarship, the Dean's List for 3 years, and 3 International Student Faculty Awards.

## PROJECTS

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### Bytesized - E-commerce platform (*Express for Node.js, Google Cloud Platform*)

A fully **Dockerized Express server** package deployed with **Google Cloud SQL** and **Cloud Run**, implementing CI/CD workflows to ensure the deployed revision of the project is always up to date with the main codebase.

### Educational Video Recommendation System (*Angular, Django*)

A holistic recommendation system that shows students educational videos based on a variety of metrics gathered from the students using a programming practice platform to enhance overall student learning.

### JUnit++ Library- Simplifying Unit Test Creation (*Java, Junit5, Judge0*)

This library enables the quick creation and modification of unit tests written specifically to validate that student-submitted code meets the requirements of a given introductory programming question.

## SKILLS

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**Languages:** TypeScript, JavaScript, Python, Bash, Java, SQL, C++, CUDA

**Infrastructure:** Docker, Kubernetes, Microsoft Azure, Terraform, Helm, Datadog, TeamCity, Github Actions, Vercel, GCP, AWS

**Backend:** Node.js, Express, MongoDB, Django, REST APIs, Redis, Kafka, HiveMQ MQTT

**Frontend:** Next.js, React Native, Angular, Redux, TailwindCSS, SASS