

## Education

#### **Bachelor of Engineering (B.Eng), Software, McMaster University** — Hamilton, ON

Dec 2022

Extracurriculars: President of Google Developer Student Clubs McMaster University; Co-Vice Chair of IEEE McMaster Student Branch; Second-Year Representative of Electrical and Computer Engineering Society; Recipient of Image of an Engineer Award

# Skills

Languages: Java, JavaScript, Python, Ruby, HTML/CSS, bash/zsh, PostgreSQL

AWS: EC2, S3, Simple Workflow Service, Step Functions, Lambda, Elastic Container Service, IAM

AWS: DynamoDB, CloudFormation, Kinesis Firehose, CloudWatch, RDS, ability to quickly learn AWS services

Tools/Frameworks: Google Firebase, ReactJS, Vercel, AWS CDK (Cloud Development Kit), git, Amazon Ion

Networking: TCP/IP, AWS Networking (VPC, load balancers, PrivateLink), understanding of networking principles

**General:** Cloud system design at scale, security principles, data security and privacy, linux

# Work Experience \_\_\_\_\_

## **Software Development Engineer,** Amazon — *Toronto, ON*

Sept 2024 - present

- Complete engineering tasks including: write CDK code to build AWS infrastructure; design and implement a monitoring mechanism using CloudWatch metrics; write Java and CDK code for Lambda functions used as a calculator in a system.
- I will lead a major testing automation project within the team, which has involved me collecting business requirements from stakeholders, documenting current processes, and I will write the design document, project plan and so forth.

## **Software Development Engineer,** Amazon Web Services (AWS) — *Vancouver, BC*

July 2023 - Aug 2024

- Successfully led the launch of a critical service after completing a rigorous security review. Coordinated with stakeholders and security engineers to finalize requirements, wrote service code in primarily Java, performed extensive testing, and facilitated the feature launch.
- Dive deep and deliver results through maintaining code and infrastructure for a critical service that many internal teams depend on. Conduct code reviews and have identified and prevented a security vulnerability from being merged
- Solve high severity escalations during on-call shifts efficiently and in a timely manner. Perform root cause analysis and solve customer inquiries.

#### Software Development Engineer Intern, Amazon Web Services (AWS) — Vancouver, BC

May 2022 – Aug 2022

- Designed and implemented the new live output feature for an internal tool similar to Jenkins for creating and managing cron jobs. This new feature allows users to view the standard output and error streams live on the web UI while a job is running, as opposed to after the job completion.
- Designed for scale with the expectation of tens of thousands of concurrent jobs to be running at any given moment. Investigated and fixed several bugs revealed in Beta testing due to high loads.
- Full-stack project using Java, Ruby on Rails, HAML, JavaScript, AWS Kinesis Firehose and S3.

#### **Software Development Engineer Intern,** Amazon — *Remote*

Summers 2020 & 2021

- Designed and built a secure internal webapp that allows developers and accountants visualize data related to Amazon.com orders. The webapp has been well received and is now actively being used by developers and accountants to aid in their daily tasks.
- Went above and beyond in the intern project by creating a library that users and developers can use to customize the UI view of the ordering data. This library is actively being used now.
- Completed end-to-end delivery of the project including requirements gathering, design, implementation, testing, documentation, and deployment to the Production environment.
- Full-stack project using Java, ReactJS, AWS CloudFormation, EC2, Endpoint Service, VPCs, CloudFront, and CodeDeploy.

#### **DevOps Software Developer Intern,** Arcturus Networks Inc. — *Etobicoke, ON*

Jan 2019 – Aug 2019

- Managed the automated testing infrastructure and continuous integration (CI) of VoIP embedded systems products. Created the CI pipeline for over a dozen embedded system products, resulting in a nightly testing system that, for the first time, reported new regression bugs as soon as they are introduced.
- Performed manual tests on products, gaining hands-on experience in Wireshark, debugging low-level firmware, configuring SIP proxies and various types of network infrastructures, VLANs, STUN/ICE/TURN servers, firewalls, DHCP, and buildroot.

#### **Backend Software Developer Intern,** Checkout 51 — *Toronto, ON*

May 2018 - Aug 2018

- · Developed an improved release management tool for the team's continuous development process using PHP. SQL/MySQL, JavaScript. Created a system that persists release information, automates tasks such as start Jenkins cron jobs and send emails to team members. Reduced the time for deployments from over 30 minutes to less than 5 minutes.
- · Added new features to internal development tools; modified existing user-facing code that fixed bugs and added functionality. Successfully completed tasks originally planned for senior developers.

#### Various Roles, Part-time, McMaster University Faculty of Engineering — Hamilton, ON

Sept 2016 - Apr 2021

- Teaching Assistant (TA) for Principles of Programming Course
- Special Projects Assistant for the McMaster University Faculty of Engineering Recruitment Office: helped plan the FIRST Robotics Competition regionals at McMaster University

  Recruitment & Communications Assistant at the Faculty of Engineering Recruitment Office
- Archway Mentor during COVID-19 pandemic: mentored cohort of 40 first-years with planned virtual activities

## Fun facts \_\_\_\_\_

- I was 1 of 2 Canadians selected to attend the United Space School in 2015, hosted by FISE Foundation for International Space Education, in Houstan, Texas. 50 students from 25 countries attended for 2 weeks to learn from experts in the space industry and astronauts! Fun fact: I had my voice up at the ISS, and Chris Hadfield tweeted about me, and my family and I met former astronaut Marc Garneau.
- Spent a summer in Boston at a startup incubator program where I was "CEO" of a startup and worked with electronics and software.
- Spent a year in Vancouver, BC, in 2023-2024. I love hiking, and walking along the ocean, and I skydove there!
- Current non-technical hobbies: ski, skate, crochet, sew, long walks
- Current technical hobbies: reading (WWW specs, Solid specs, Linux book, container security book)
- What I aspire to do (technical): build a programming language (compiler), finish my website https://sniptags.com - hopefully can build it on Solid!, build a chat app with customizable UI and customizable backend (hopefully using Solid Chat specs!), make contributions to specifications WWW-related or Solid!