Brendon Tsim

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EDUCATION

University of British Columbia

May 2024

Bachelor of Science, Major in Computer Science

Vancouver, BC

- 4.0 GPA; 92.4% Computer Science Average
- Coursework: Machine Learning, Distributed Systems, Parallel Computing, Computer Networks
- Teaching Assistant for UBC's computer architecture & operating system courses (total 1 yr.)

WORK EXPERIENCE

Arista Networks Sep 2023 - Dec 2023

Software Engineer Intern, Platform

Vancouver, BC

- Worked with SONiC's open-source community to extend multi-asic features & add new IPv6 tests.
- Extended CLI to enable configuration of multi-asic devices for various L2/L3 features with Python.
- Created new IPv6 testing infrastructure and tests in QoS suite to prevent further regressions.
- Explored improvements in system observability by prototyping drop count monitoring in C++.

Alida Jan 2022 - Aug 2022

Software Engineer Intern, Surveys

Vancouver, BC

- Created web-accessible (WCAG) question components for Surveys using React, TypeScript & Jest.
- Owned architectural changes for migrating the frontend app to new backend API specifications.
- Reduced pipeline blocks from non-deterministic failures by introducing new testing infrastructure.
- Collaborated closely with product manager & UX designer to rapidly iterate on customer feedback.

Kai Shing Management Services Limited

May 2021 - Jul 2021

Software Engineer Intern, IT Headquarters

Hong Kong SAR

- Automated manual workflows by creating a management dashboard in Java, Spring MVC and SQL, allowing staff to update building information and notices without manual IT staff intervention.
- Processed API endpoints in APIM with scripts in Liquid and C# for an app with 10k+ active users.
- Handled processing & analysis of air-quality data from 25+ IoT devices with Java and SQL.

PROJECTS

Raft (as described in the paper presented in ATC2014) Go (Golang)

• Implemented Raft, a distributed systems consensus protocol for managing replicated logs.

Japanese Coin Counter | Python, Jupyter Notebooks, YOLOV8

• Trained segmentation & classification model for Japanese coins from scratch with YOLOV8.

ROBLOX Freelance Game Development | Lua

• Created updates & new features for Starship Roleplay, a game series with 3M+ unique plays.

TECHNICAL SKILLS

Languages: C, C++, TypeScript, Java, Python, Go (Golang), C#, SQL, HTML, CSS, Lua, Promela, CUDA Frameworks: React, Next.js, Spring MVC, JUnit, Jest, Mocha, Chai, Flask, JSP, Struts, Material-UI, SPIN Developer Tools: Git, Linux, Heroku, Google Apps Script, Qlik Sense, REST, WCAG

Spoken Languages: English, Chinese (Cantonese, Mandarin), Japanese (JLPT N1 - Business Level)