

Patrick Chan

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Work Experience

Amazon Web Services (AWS)

Software Development Engineer II

Jul 2024 – Present

Vancouver, BC

- Simple Queue Service (SQS) Workload Management & Automation Team
- Full stack development using Kotlin, Java, Spring, and JUnit

Amazon Web Services (AWS)

Software Development Engineer I

Jul 2022 – Jun 2024

Vancouver, BC

- Simple Queue Service (SQS) Workload Management & Automation Team

Amazon Web Services (AWS)

Software Development Engineer I Intern

May 2021 – Aug 2021

Vancouver, BC

- Full stack development on the Simple Queue Service (SQS) Workload Management Team using Kotlin, Java, Spring, and JUnit
- Streamlined on-call operator workflows for identifying, diagnosing, and resolving issues
- Improved internal operational dashboard visibility of critical backend metrics and alarm states

Thrive Health

Software Developer Intern

Sep 2020 – Apr 2021

Vancouver, BC

- Full stack development using Node.js, TypeScript, React, Redux, PostgreSQL, HTML5, CSS
- Developed and maintained a scalable RESTful API integration for generating bulk COVID-19 test requisitions using AWS Lambda, Amazon SQS, and Amazon S3
- Increased the speed of costly user access checks by approximately 500% by identifying a use case for caching
- Improved accessibility of the Canada COVID-19 App to meet WCAG 2.0 guidelines by streamlining screen reader behaviour with clear ARIA labelling and component hover & focus states

Projects

Potatofy | Python

- Questrade integrated desktop GUI application for simplified rebalancing of investment portfolios
- Calculates shares to buy/sell using current market prices to achieve users' target asset allocations
- Securely requests user financial information using OAuth 2.0 authentication via the Questrade API

contrast-checker | Rust

- Rust-based CLI tool for calculating contrast ratio between two colours based on Web Content Accessibility Guidelines
- Implemented support for calculations using RGB or Hex colour models

ADASPlusML | Python, Scikit-learn, pandas

- Trained a machine learning model with Scikit-learn to score the ADAS-Cog Plus cognitive assessment for Alzheimer's Disease
- Performed 10-fold cross validation to test the accuracy of the multiple linear regression model

Education

University of British Columbia

Bachelor of Computer Science (Integrated Computer Science)

Sep 2019 – May 2022

Vancouver, BC, Canada

University of British Columbia

Bachelor of Science in Integrated Sciences (Neuroscience & Physiology)

Sep 2011 – May 2016

Vancouver, BC, Canada

Skills

Languages

Java, Kotlin, TypeScript, JavaScript, Ruby, Golang, SQL, Python, Rust, C++, R, HTML, CSS

Tools

Git, Node.js, PostgreSQL, Docker, LaTeX

Frameworks

Spring, JUnit, Mockito, React, Redux, Mocha, Chai, REDCap