John Ahn

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EDUCATION

University of British Columbia

Vancouver, BC

May 2025

Bachelor of Computer Science

• WAM/GPA: 85% (3.9/4.0)

Experience

Full Stack Developer Intern

May 2024 – Aug 2024

Checker Software Inc.

Vancouver, BC

- Developed a desktop application in **Electron** for Diffchecker, a comprehensive tool for comparing files and folders.
- \bullet Reduced memory usage by 90% for PDF comparisons by leveraging virtualized rendering and lazy loading.
- Improved application stability by isolating each tab in its own process, reducing the impact of crashes.
- Built a custom user analytics tool in **React** and **Node.js** for session recording and event tracking.

Software Developer Intern

Jan 2023 – Dec 2023

Vancouver. BC

Elastic Path

- Designed microservices in Go to build a robust backend system for e-commerce platforms.
 Achieved a 99% reduction in propagating external service updates by optimizing cache invalidation in the API
- Scaled up stores to handle over 15 million API calls per hour by implementing customizable rate limits.
- Collaborated with senior developers to implement Role-Based Access Control (RBAC) for users.

Software Developer Intern

May 2022 – Aug 2022

NetApp

Vancouver, BC

- Built a native engine that provides real-time analytics of NetApp's distributed file system.
- Developed a space-saving algorithm to track frequent and top-k elements in each data volume.
- $\bullet \ \ \text{Improved automated } \textbf{Python} \ \ \text{tests for ONTAP's high-availability (HA) storage nodes to ensure fault tolerance.}$
- Pinpointed software defects and worked alongside QA on solutions and implementation.

Undergraduate Research Assistant

Jan 2021 – Jul 2022

The Reliable, Secure, and Sustainable Software Lab

gateway through event-driven communication (RabbitMQ).

Vancouver, BC

- Engineered an unsupervised ML solution in Python to refactor Java monolithic applications into microservices.
- Assembled a clustering tool to provide users with different microservice recommendations of their application.
- Received **Distinguished Paper Award** at the 38th International Conference on Software Maintenance and Evolution (ICSME), 2022 (23% acceptance rate).
- Awarded **Project of the Year** at IBM's CASCONxEVOKE 2022 Conference.

Projects

Autonomous Sailboat

- Led a team to develop a website for real-time monitoring of an autonomous sailboat.
- Developed a full-stack web application using React, Redux, and MongoDB on the Next.js framework, featuring dashboards for diagnostic analysis and interactive maps to showcase computed paths and obstacle navigation.
- Fostered a team environment emphasizing iterative development, collaboration, and documentation.

Neural Notes

- Designed an Android app in Java that uses ML to play back musical scores from a photo capture.
- Trained a CRNN model using PyTorch to analyze and categorize musical notation.

TECHNICAL SKILLS

Languages: Go, Python, Java, TypeScript, JavaScript, SQL (Postgres), C++, C, HTML/CSS

Frameworks: Redis, RabbitMQ, Redux, React, Node.js, Flask, FastAPI, Cucumber.js, Playwright, nginx, Next.js

Developer Tools: Git, Docker, Kubernetes, Datadog, Sentry, VS Code, AWS, Google Cloud Platform