# **Harry Nguyen**

## Education\_

## Simon Fraser University (SFU)

Burnaby, B.C

Bachelor of Science in Computer Science

Sep 2019 – May 2025

- **GPA:** 3.7/4.0
- Coursework: UI Design, Object Oriented Design, Distributed Systems, Database Systems, Data Structures & Algorithms

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

## **Motorola Solutions (Avigilon)**

Vancouver, B.C

Software Developer Co-op | JavaScript, React, JQuery, Ruby, Ruby on Rails

Jan 2024 - Sep 2024

- Enabled real-time control and monitoring for 20+ access points and devices on a map-based page by developing front-end components with React and web sockets; showcased at ISC West 2024
- Improved usability across multiple screen sizes and languages, reducing completion time for common tasks by 40%, by implementing a responsive menu system with native browser APIs and React hooks
- Prototyped an AI chatbot using natural language libraries and REST APIs to perform real-time system actions (e.g., locking access points) and reduce user task time by up to 50%
- Increased deployment confidence by extending the front-end test suite by 15% via unit and user simulation tests

## **ICBC (Insurance Corporation of British Columbia)**

North Vancouver, B.C

Application Developer Co-op | Java, JavaScript

Jan 2022 - Sep 2022

- Collaborated with stakeholders to migrate 12 web applications from Java 7 to Java 11, involving tasks such as updating deprecated code and dependencies, and resolving bugs
- Remediated 30% of vulnerabilities found in 12 Java applications during penetration testing by configuring HTTP headers

## **Projects**\_

## **Community Based Rehabilitation (CBR)** | TypeScript, React, React Native, Python, Django

- Collaborated with a non-profit and SFU to develop an open-source platform helping Ugandan refugee settlements track client data and facilitate referrals to critical services (e.g., food aid, wheelchair access) for 500+ clients
- Improved accessibility for Ugandan users by adding multilingual support (English/Bari) for 700+ strings with i18next
- Reduced client data input time by up to 80% by redesigning mobile app workflows based on user feedback
- Authored a paper on the importance of accessibility, identifying common pitfalls, and ensuring WCAG 2 compliance

#### Cradle | TypeScript, React, Kotlin, Android, Python, Flask

- Worked with SFU and doctors in Kings College London to implement features for a patient management system, removing barriers to timely care and reducing maternal deaths in low-income countries
- Implemented caching, background refetching, and request deduplication across 87 API call points by using Tanstack Query
- Enabled reliable offline communication for mobile devices by handling errors in a custom SMS/HTTP tunneling protocol

## NBA All-Star Classifier | Python, Pandas, Jupyter

- Created a machine learning (ML) data pipeline to identify NBA all-stars, achieving an accuracy score of 97%
- Generated ML features by processing over 80,000 data points from basketball-reference.com
- Identified relationships between player statistics and all-star selection by conducting PCA on 19 metrics

## Technical Skills\_\_\_\_

**Languages:** TypeScript, JavaScript, Python, Ruby, Java, SQL, HTML, CSS

**Libraries & Frameworks:** React, React Native, Next.js, Vue.js, Rails, Spring Boot, Redux, Express, JQuery, Pandas

**Testing:** Jest, Vitest, Testing Library, Playwright

Other Technologies: Node.js, Docker, Git, Amazon Web Services (AWS), PostgreSQL, MySQL, Vite, Linux, Jira