# **Melvin Teo**

## **EDUCATION**

Bachelor of Science (B.Sc.) in Computer Science - 4.00 GPA

The University of British Columbia, Vancouver, BC

# **EXPERIENCE**

# Software Engineer Intern, Amazon

May 2023 - August 2023

Expected Grad: April 2025

Technologies: Java, TypeScript, AWS

- Optimized the Amazon Prime membership cancellation flow for millions of customers from a 3-page to 2-page flow
- Updated configurations for 4 services serving the cancellation flow to ensure marketplace expansion compatibility
- Refactored codebase for AWS CloudWatch dashboards and alarms monitoring worldwide cancellation flow traffic
- Developed a Cookie Override feature to optimize QA A/B testing for customer experiences, saving 15 mins per test

#### Amazon Future Engineer Intern, Amazon

May 2022 - August 2022

Technologies: TypeScript, AWS, FreeMarker, Bash

- Implemented customer-facing features (e.g. emails, page widgets) related to Pausing & Resuming memberships for **millions** of worldwide Amazon Prime customers, helping to retain **tens of thousands** of customers annually
- Automated feature implementation across 14 countries using Bash scripts, reducing development time by 49% and costs by 43%
- Created and deployed 10 AWS CloudWatch Metrics Widgets and 20 Alarms using an AWS TypeScript CDK to monitor Prime Membership Pause & Resume features

#### **Development Director, nwPlus UBC**

May 2023 - Present

**Technologies:** Next.js, React, Firebase (Firestore, Storage, Analytics, Hosting)

- Leading a team of 6 developers to build 3 external websites and maintain 4 internal tools (e.g., QR Check-in App)
- Establishing industry standards to improve code quality using Prettier, ESLint, and CI/CD workflows
- Providing technical support to 8 non-technical subteams (e.g., Sponsorship, Design, etc.)
- Fostering a design-first and doc-writing team culture to enable knowledge transfer and quality assurance

## **Hackathon Logistics Director, nwPlus UBC**

April 2022 - April 2023

• Directed the successful execution of **HackCamp 2022**, Western Canada's largest beginner-friendly hackathon, with ~100 participants (76% first-time hackers), 26 project submissions, and a prize pool of over \$1500

# **PROJECTS**

# **Expawdition (Stormhacks 2023 - 1st Place)**

**Devpost** | Github

Technologies: Next.js, React, Firebase (Firestore), Express, Node

- Developed an AI trip planner using the **GPT-3.5-turbo** AI model, **Google Places API**, and **Google Routes API** to generate optimized itineraries that consider user destinations, budgets, travel time, and personal preferences
- Designed a user-friendly interface using the Chakra UI library and custom Figma illustrations
- Collaborated with a team of 4, including a Project Manager, a Designer, and 2 Developers, to transform a Figma prototype into a fully functional **FERN** stack web application within 24 hours

liftz Workout Tracker Demo

Technologies: Next.js, React, MongoDB, Express, Node

- Developed a comprehensive workout tracker web app, including pages for a workout library, visual plate calculator, automatic PR (personal record) tracker, and session history calendar using the MERN stack and MVC pattern
- Leveraged **Next.js** server-side rendering to optimize for seamless user experiences, effectively eliminating the flickering effect during data updates and ensuring smooth and consistent page loads
- Utilized Chakra UI for a modern and visually appealing user interface, and Formik & Yup for robust form validation
- Implemented user authentication and user sessions with Passport.js & Express Validator

#### **SKILLS**

Languages: Java, C/C++, JavaScript, TypeScript, Python, SQL, HTML/CSS

Tools & Frameworks: React, Express, Node, MongoDB, Git, Next.js, Flask, Firebase, JUnit, Bash, AWS