Melvin Teo

EDUCATION

Bachelor of Science (B.Sc.) in Computer Science - 4.20 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 **Prime** membership cancellation flow for **millions** of customers from a 3-page to 2-page flow
- Ensured marketplace expansion compatibility for the main cancellation flow service and 4 downstream services
- Refactored codebase for AWS CloudWatch dashboards and alarms monitoring worldwide cancellation flow traffic
- Developed a Web Cookie Override feature to optimize QA A/B testing, saving 15 mins/test for hundreds of tests

Amazon Future Engineer Intern, Amazon

May 2022 - August 2022

Technologies: TypeScript, AWS, FreeMarker, Bash

- Implemented customer-facing Prime membership pause & resume features (e.g. emails, page widgets) for millions
 of worldwide 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 dashboards and 20 alarms to monitor worldwide pause and resume traffic

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 accessible 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 four, including a Project Manager, a Designer, and two 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 a workout library, a visual plate calculator, an automatic PR (personal record) tracker, and a session history calendar using the **MERN** stack and **MVC** pattern
- Leveraged **Next.js** server-side rendering to optimize for seamless user experiences, 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