Harry Allen

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Education

King's College London

London, UK

BSc Computer Science with a Year in Industry

Juanita High School

High School Diploma (3.913 UW GPA), AICE Diploma (with merit)

September 2025 – June 2029 Kirkland, WA, USA

September 2021 – June 2025

Experience

AI Intern

July 2025 – October 2025

Ladybug Workshop/Velamentis

Remote

- Researched feasibility and prototyped implementation of an AI search bot in Python using RAG, LangChain, LangGraph, and Claude tools which guide users to appropriate proprietary internal knowledge base in a Chroma DB while maintaining safety through guardrails.
- Researched implementation of an AI chatbot which assists users in creating documentation.
- Researched potential pitfalls and risks with using AI in the assigned space.

Software Developer

September 2024 – August 2025

Cartogram

Bellevue, WA, USA

- Created UI for multi-venue hospitals.
- Implemented kiosk UIs, worked with a hospital to implement additional custom touchscreen kiosk UI.
- Optimized and automated deployment with CI/CD.
- Re-implemented the map editor, streamlined UI and authentication.
- Integrated Bluetooth Low-Energy wayfinding in the web app with Bluetooth beacons, enabling live indoor navigation.
- Supervised and guided interns and other employees through working with the new web app.

Software Developer Intern

July 2024 – August 2024

Cartogram

Bellevue, WA, USA

- Increased presence of iconography throughout app.
- Spearheaded rewrite of Cartogram's hospital wayfinding app from scratch in SvelteKit while improving the UI with shaden-ui and performance through server-side rendering.

Code Hope Global Volunteer

January 2024 – May 2024

Code Hope Global

Kirkland, WA, USA

• Created a 10-week course (PowerPoints and scripts for teachers) on the basics of web development to under-resourced children in rural India.

Chapter President, Secretary

September 2023 – June 2025

Juanita High School Technology Student Association

Kirkland, WA, USA

- Doubled membership; jumped to 5th largest chapter in Washington State.
- Created a web-based user and competition-management system for 100+ members and advisors to create and manage competitive event teams using Firebase and SvelteKit, and to organize chapter competitions and provide feedback.
- Organized meetings and communicated with members, parents, and state leadership.

Projects

Foodchain | TypeScript, Svelte, Supabase, SQL, HyperLedger Fablo, shadon October 2024 – April 2025

• Created an app to utilize blockchain with HyperLedger Fablo to assist farmers, consumers, and distributors in monitoring their supply chain with a SvelteKit frontend.

Pantry Dash | TypeScript, Supabase, Flowbite, Tailwind, TensorFlow

December 2022 – June 2023

• Led a team to create a pantry-management web app which generates recipes based on a user's pantry ingredients using Supabase and SvelteKit and uses image recognition to track users' fridge items using TensorFlow (3rd at 2023 Washington TSA State conference, 2023 National TSA semifinalist for Software Development event).

Technical Skills

Languages: (Java/Type)Script, Java, Python, SQL

Frameworks: React, Svelte, Vue, Angular, Node.js, Tailwind

Developer Tools: Git, Google Cloud, Node, Deno **Libraries:** Firebase, Supabase, shaden, TensorFlow