Ryan Le

253-439-7098 | ryanvanle.tech@gmail.com | ryanvanle.com | linkedin.com/in/ryanvanle | github.com/ryanvanle

Education

University of Washington Seattle, WA

B.S. Computer Engineering | GPA: 3.50 Sept. 2021 – June 2025 (Expected)

Relevant Courses: Accessibility, HCI, Project Management, Data Structures & Parallelism, AI, Distributed Systems

Experience

Amazon | Software Development Engineer Intern June 2024 – Sept. 2024

- Implemented the Electronic Gift Cards Amount Picker Feature for Amazon Shopping through a Detail Page framework migration team project alongside 8 Gift Card Experience Software Development Engineers.
- Integrated Amazon's internal tooling, leadership principles, and internal shopping technical frameworks within only 12 weeks, including Java, Spring Boot, JQuery, and JSP.
- Resolved accessibility tickets and implemented international marketplace features such as Currency of Preference.
- Presented technical documentations overview alongside in-depth documentation to the Payments Organization.

Web Impact | Lead Website Developer & Design Member Jan. 2023 – June 2023

- Led development of a website for a local engineering club for improved online social outreach through UW Web Impact, a club to help small businesses and clubs by creating high-quality websites.
- Designed mobile-friendly website designs through Lo-Fi/Hi-Fi design in Figma with a 5-person design team.
- Translated website designs to a website through JavaScript, HTML, CSS with a 3-person coding team.
- Implemented user-friendly real-time website editing through Sanity for client usage after initial deployment.

Projects

Tactus Jan. 2025 – Mar. 2025

- Co-developed a discovery-based image-search web application (JavaScript, HTML, CSS, Firebase) in a 4-person team, enhancing art experiences for Blind/Visually Impaired (BLV) tactile artists in a digital space.
- Designed and implemented a community-driven platform enabling users to explore artworks, art components, and art interpretations, addressing the lack of direct visual-to-tactile translation methods and promoting collaborative artistic dialogue through "Community Suggestions" feature.
- Engineered key features including enriched alt-text for all non-text content, screen reader compatibility, interactive image segmentation for compositional tagging, through interviews from BLV artists and accessibility mentors.

Space Invaders (but not that one) Apr. 2024 – June. 2024

- Developed a video game to bring awareness to Washington's invasive species issue alongside 3 developers.
- Prototyped a physical wireless net controller to catch invasive species through a ESP32 micro-controller in C++, 3D-printing, and a Node.js server connected to WebSocket to capture input for a web application.
- Utilized ml5.js Computer vision hand gesture model as an AI controller to take informational wildlife snapshots.
- Won Best Game Controller and Best Game Overall awards within 8 other teams.

Lite Lingo Nov. 2023 – Dec. 2023

- Developed a full-stack Chrome extension with the goal of helping individuals with learning disabilities, by allowing users to select any website text, transforming it to a plain language translation, and editing it for anyone to see.
- Built an Express RESTful API using Node.js with an AWS PostgreSQL database to store and retrieve websites' plain language annotations, and to generate initial translations through OpenAI ChatGPT-3.5 API.
- Earned the AA conformance in the W3 Web Content Accessibility Guidelines, through automated accessibility testing, and manual testing using accessibility tools such as screen readers and switch control.
- Presented and discussed work at a University of Washington accessibility event with over 100 attendees.

Geo Car May 2023 – June 2023

- Developed a full-stack website to determine car makes in user-picked areas aimed to offer data-driven insights for car manufacturers through Computer Vision.
- Leveraged Google Streetview API and Maps API to extract user-selected locations to be processed by YOLO Object Detection model via ML5.js to identify cars and send to a back-end server to determine the car make.
- Successfully identified car makes worldwide, despite challenges such as outdated data, and model constraints.

Technical Skills

Languages: Java, JavaScript, TypeScript, Python, HTML, CSS, SQL, Lua Arduino, Swift, C, C++, Bash
Frameworks: React.js, Spring, Node.js, Express.js, JQuery, Django, JUnit, Godot, TensorFlow, Firebase, JSP, D3.js, ML5.js, p5.js, Three.js, Tailwind CSS, Bootstrap CSS
Developer Tools: Git, Figma, Azure, AWS, Linux/Unix, Heroku, Adobe Creative Suite, SOLIDWORKS, AutoCAD