

Ryan Le

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EDUCATION

University of Washington

Seattle, WA

B.S. Computer Engineering | GPA: 3.50

Sep. 2021 – June 2025 (Expected)

Relevant Courses: HCI, Computer Vision, Data Structures & Parallelism, Databases, Web Development

EXPERIENCE

Dubvelopers | 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 Dubvelopers, 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.
- Won “Best Accessibility Website” from an end-of-development showcase contest with 100 attendees.

Self-employed | Video Game Controller Technician

Mar. 2019 – Sep. 2021

- Repaired and modified GameCube Controllers to fix and improve its competitive viability for tournament-level competitors in the video game series “Super Smash Bros.”
- Performed hardware component installations and repairs requiring soldering, precise filing controller plastic, general controller cleaning, lubricating controller parts, and aesthetic modifications.
- Profited \$2,000 in total after 2 years of self-taught learning and performing controller modifications.

PROJECTS

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.
- Integrated a custom-trained TensorFlow image recognition model with a Django REST API via Python to analyze clients’ car images, extract car make labels, and subsequently display and visualize the data using D3.js for users.
- Successfully identified prevalent car makes worldwide, despite challenges posed by outdated data, model constraints, and integrating multiple technologies.

Writer’s Block

Oct. 2022

- Developed a React multiplayer front-end website in under 24 hours for the DubHacks 2022 Hackathon, where the 4 players compete in a real-time online writing test to see who can write the fastest.
- Adapted Google Input Tools handwriting model through an open-source library, handwriting.js, to allow users to digitally write out their answers than typing.
- Utilized and learned a NoSQL database, Firebase, to store in real-time active game states and players’ writing progress, then displays that information for all players in real-time.

Image To Plant

July 2022 – Aug. 2022

- Identified a plant identification issue with beginner plant hobbyists and developed a personal project front-end website using JavaScript, HTML, and CSS, that identifies a user’s plant image to the plant’s species.
- Integrated Azure’s Bing Web Search API to create a dataset containing 30,859 images of 250 unique plants.
- Remodeled and trained using a machine learning model, MobileNetV3, using Python and TensorFlow to identify plant species through transfer learning.
- Converted custom back-end TensorFlow plant identifying model to a front-end TensorFlow.js model to deploy the model on the web without a back-end server.

Bear Bakerie

Nov. 2021 – Dec. 2021

- Developed a full-stack proof of concept e-commerce website that sells bakery items alongside 1 other developer.
- Designed and implemented the website’s UI and overall functionality through JavaScript, HTML, and CSS.
- Built an Express REST API using Node.js with a PostgreSQL database to retrieve information such as the store’s items, search results, account details, or purchase history.

TECHNICAL SKILLS

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

Frameworks: React, Node.js, Django, JUnit, Express, TensorFlow, Firebase, Sanity, D3.js, ML5.js

Developer Tools: Git, Azure, Figma, Heroku