Ryan Le

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EDUCATION

University of Washington   Seattle, WA
B.S. Computer Engineering | GPA: 3.43   Sept. 2021 – June 2024 (Expected)
Relevant Courses: Software Design & Implementation, Data Structures & Parallelism, Philosophy of AI

EXPERIENCE

Website Designer & **Developer** | *Dubvelopers*   Jan. 2023 - Present
- Developing a website for a local engineering club, the Steel Bridge Team at UW, for social outreach through Dubvelopers, a club to help small businesses and clubs by creating high-quality websites.
- Designing and prototyping website designs through Lo-Fi / Hi-Fi design in Figma with a 5-person design team.
- Translating website designs to a website through JavaScript, HTML, CSS with a 5-person coding team.
- Communicated with clients to ensure their wants and needs were met and incorporated general design feedback.

Video Game Controller Technician | *Self-employed*   Mar. 2019 - Sept. 2021
- Repaired and modified GameCube Controllers to fix and improve its competitive viability for tournament-level players who compete in the video game series "Super Smash Bros."
- Performed hardware component installations and repairments requiring soldering, precise filing controller plastic, general controller cleaning, lubricating controller parts, and aesthetic modifications.
- Profited $1,000 in total after two years of self-taught learning and performing controller modifications.

PROJECTS

Image To Plant | *Python, Azure, TensorFlow, TensorFlow.js, JavaScript, HTML, CSS*   July 2022 – Aug. 2022
- Identified a plant identification issue with beginner plant hobbyists and developed a personal project front-end website that identifies a user's plant image to the plant's species.
- Integrated Bing Web Search API to create a custom image dataset containing 30,859 images of 250 unique plants.
- Remodeled and trained an existing machine learning model, MobileNetV3, to identify plant species through transfer learning and achieved 70% validation accuracy.
- Converted custom TensorFlow plant identifying model to a TensorFlow.js model to deploy the model on the website without a back-end server.

Writer's Block | *JavaScript, HTML, CSS, Firebase, Git*   October 2022
- Developed a 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.

Bear Bakerie | *JavaScript, HTML, CSS, Node.js, PostgreSQL, Express, Git*   Nov. 2021 – Dec. 2021
- Developed a full-stack proof of concept e-commerce website that sells bakery items alongside one other developer.
- Designed and implemented the website's UI and overall functionality through JavaScript, HTML, and CSS.
- Built an Express REST API and a PostgreSQL database to retrieve information such as the store's items, search results, account details, or purchase history, for the front-end website through a Node.js back-end server.
- Wrote comprehensive API documentation on its functionality and how to use and integrate the API effectively.

Campus Paths | *Java, React, TypeScript, CSS, Java Spark, JUnit*   Jan. 2022 – Mar. 2022
- Developed a full-stack website that finds the shortest path between two user-picked University of Washington Seattle Campus Buildings as a class project for Software Design & Implementation.
- Built and designed a custom graph data structure in Java and implemented Dijkstra's Algorithm.
- Created multiple JUnit test suites to ensure code implementations were correct and to reduce possible errors.
- Deployed a Java Spark server back-end API to communicate and send path data to the React front-end website.

TECHNICAL SKILLS

Languages: Java, JavaScript, TypeScript, Python, HTML, CSS, SQL, C, C++, Bash
Frameworks: React, Node.js, JUnit, Express, TensorFlow, Firebase
Developer Tools: Git, Azure, Figma, Heroku, VSCode, IntelliJ, Linux/Unix, Sanity
Other Technologies: SolidWorks, AutoCAD, Adobe Creative Cloud