Ryan Harang

425-229-8206 | Contact | Linkedin | Github | Portfolio

EDUCATION

Western Washington University

Sep. 2021 – Present

3.74 Cumulative GPA — Majoring in Computer Science

Bellingham, WA

EXPERIENCE

Teaching Assistant

September 2023 – Present

Western Washington University

Bellingham, WA

Guiding students to a more comprehensive knowledge of course content as well as grading assignments.

Research Assistant

April 2023 – Present

Western Washington University

Bellingham, WA

- Spearheaded the transfer of site content to React and improved user experience for the <u>Index In-Bounds Lab</u>.
- Now working on curating the back-end with a database system to publish lab work, using Express and Node.js.

Internship

June 2023 – July 2023

The Ladder

Redruth, UK

• While residing in Redruth, I played a key role in leading a collaborative effort with <u>The Ladder</u>. Together, we developed an interactive audio system that ran through Alexa.

Personal Care Assistant

Sep. 2022 – April 2023

Consumer Direct Care WA

Bellingham, WA

• Facilitated and supported daily activities for a client with cerebral palsy, including cooking, cleaning, and exercise.

Squad Member

June - Sep. 2021 & 2022

MOD Pizza

Issaguah & Bellevue, WA

• Provided direct customer support for up to 40 hours per week, ensuring high standards and quality service.

Projects

Weather-App | React, CSS, Python, Google Firebase, OpenWeatherMap API

Aug. 2023 – Sep. 2023

- Engineered a dynamic web application presenting regional weather data, integrating API usage, data parsing, and React. Successfully deployed the application through Firebase.
- Optimized performance by constructing an extensive city database using Python, extracting data from GeoNames, and implementing population-based filtering for enhanced loading speed. Employed virtualization techniques to further boost performance.

Pente | Java, React, CSS, Google Firebase

June 2023 – July 2023

- Implemented the board game Pente as a text-user-interface in Java, later enhancing it with a graphical-user-interface using React. Hosted the game on Firebase.
- Developed a fast and functional game utilizing conditional rendering, props, useState, and useEffect. Implemented features such as restart and undo buttons to provide users with easy control over the game state

Deadwood | Java, JavaFX, XML, Git

April 2023 – June 2023

- Collaborated on the implementation of the Deadwood board game in Java, initially as a text-user-interface and later enhancing it with a graphical-user-interface using JavaFX.
- Applied object-oriented principles, including SOLID, and utilized design patterns such as builder and singleton to create a clean and efficient project structure

Racket Parser and Evaluator | Racket

Oct. 2022 – Dec. 2022

- Developed a Parser and Evaluator in Racket that collaboratively process strings using an LL1 grammar. The parser breaks down strings into a format aligning with the procedure-first style used by Racket for evaluation.
- Implemented the evaluator to handle the processed data, determining the final result efficiently.

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, JavaFX, SQL, HTML/CSS, LaTeX, Assembly, Racket, XML, C, R

Frameworks: React, Node.js, Express, Bootstrap, Tailwind CSS

Tools: Git, Google Firebase, VS Code, Vite, Axios, Postman, Linux, WSL, MongoDB