Ryan Harang

425-229-8206 | <u>Contact</u> | <u>Linkedin</u> | <u>Github</u> | <u>Portfolio</u>

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*
- I assist students with course work and grade assignments for a lower level Computer Science class.

Research Assistant — April 2023 – Present
Western Washington University — *Bellingham, WA*
- Working with the <u>Index In-Bounds Lab</u> at Western, where I have been involved in transferring site content to React on the front-end.

Internship — June 2023 – July 2023
The Ladder — *Redruth, UK*
- For two months I resided in Redruth and collaborated with <u>The Ladder</u>, a non-profit based in Cornwall.
- We worked together to create an interactive audio system that runs through Alexa.

Personal Care Assistant — Sep. 2022 – April 2023
Consumer Direct Care WA — *Bellingham, WA*
- Assisted someone with cerebral palsy in completing chores and tasks, including cooking, cleaning, and exercise.

Squad Member — June 2021 - Sep. 2021 & June 2022 - Sep. 2022
MOD Pizza — *Issaquah & Bellevue, WA*
- Provided direct customer support for up to 40 hours per week, ensuring quality customer service.

PROJECTS

Weather-App | *React, CSS, Python, Firebase, OpenWeatherMap API* — Aug. 2023 – Sep. 2023
- Developed a web application utilizing OpenWeatherMap API to dynamically present regional weather data.
- Constructed an extensive city database by extracting data from GeoNames, implementing population-based filtering with Python for improved loading speed. Additionally, I employed virtualization techniques for further performance enhancement.
- Seamlessly integrated API usage, data parsing, and React to create the web application, subsequently deploying it on Firebase here.

Pente | *Java, React, CSS, Firebase* — June 2023 – July 2023
- Implemented the board game Pente in two stages: first as a text-user-interface in Java, and then as a graphical-user-interface using React. I then utilized Firebase to host the game here.
- Using conditional rendering, props, useState and useEffect, I created a fast and functional game with restart and undo buttons that allow users to modify or revert the game state easily.

Deadwood | *Java, JavaFX, XML, Git* — April 2023 – June 2023
- Collaborating with a partner, I implemented the board game Deadwood in Java, initially creating a text-user-interface and later enhancing it with a graphical-user-interface utilizing JavaFX.
- Applied object-oriented principles such as SOLID, and employed design patterns including builder and singleton to create a clean and efficient structure.

Racket Parser and Evaluator | *Racket* — Oct. 2022 – Dec. 2022
- Developed a Parser and Evaluator in Racket that work in tandem. The parser first processes strings using an LL1 grammar, breaking them down into a form that aligns with the procedure-first style used by Racket for evaluation. Subsequently, the evaluator takes over, handling the processed data and determining the final result.

TECHNICAL SKILLS

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

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

Developer Tools: Git, Google Firebase, VS Code, Postman, jGrasp, Linux, WSL, MongoDB, EMACS