# Ryan Harang

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

#### **EDUCATION**

## Western Washington University

Sep. 2021 – June 2025

3.74 Cumulative GPA — Majoring in Computer Science

Bellingham, WA

#### EXPERIENCE

## CS Teaching Assistant

Sep. 2023 – Present

Western Washington University

Bellingham, WA

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

## CS 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>.
- $\bullet \ \ \text{Now working on curating the back-end with a database system to publish lab work, using Express and Node.js.}$

Internship

June 2023 – July 2023

The Ladder Redruth, UK

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

Issaquah & Bellevue, WA

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

## **PROJECTS**

#### Scheduling Simulation | C, Python

April 2024 – May 2024

- Created a process scheduling simulation in C that parses a text file to instantiate processes and uses complex rules for scheduling. The program includes preemptive and non-preemptive modes.
- Utilized a linked list and a priority queue to create a multilevel environment for scheduling, executing, and promoting processes.
- Made a python script to generate processes and a shell script to test with various parameters.

Game-Rating-Site | MongoDB, Express, React, Node.js, Vite, CSS, Render, AWS

Dec. 2023 – Jan. 2024

- Developed a site utilizing MERN stack that allows users to add games to the site and add ratings to the games.
- Implemented S3 bucket to store images and MongoDB to store user, game, and rating data collections. Established backend using Node.js and Express, and have now deployed the site using Render.

Weather-App | React, Vite, 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 city database using Python, extracting data from GeoNames, and implementing population-based filtering.

Deadwood | Java, JavaFX, XML, Git

April 2023 - June 2023

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

### Technical Skills

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

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

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