Noah Crouch | bjoonho@outlook.com | 253.459.5948

EDUCATION
B.S. Electrical Engineering, Embedded Systems Concentration - University of Washington - Seattle, WA
Expected Graduation: December 2023 - GPA: 3.33 - Deans List: Fall 2022, Spring 2023

SKILLS
- **Java** (3+ years), **C/C++** (2+ years), **Python** (1+ years), **JavaScript/TypeScript** (1+ years)
- Tools: **React.js**, **Spark Java Framework**, **Django**, **Node.js**, **Arduino**, **CAD**, **JavaFX, GoogleTest, GNU, Linux, Windows, Bash, Scripting, JUnit, Git, Maven, Gradle, Makefile, NPM, Yarn**
- People management, communication, problem-solving, impact-driven, critical thinking, conflict management, adaptability, quick learning, team player, diligent, client focussed, attention to detail, efficient, clean

WORK EXPERIENCE
Undergraduate Research Assistant | UW Ubiquitous Computing Lab | March 2023 – Current
- Designed and implemented new assistive technology for users with musculoskeletal impairments.
- Using OnShape CAD, rapidly designed and produced **100+** prototypes of devices to aid users with multiple compounding disabilities in applying eye drops.
- Prepared documents, performed preliminary research, and searched for supporting information in preparation for additional projects related to different musculoskeletal impairments.

Undergraduate Software Engineer | UW S.E.A.L Lab | November 2022 – March 2023
- Worked in a team of 3 to develop a website for hosting an in-lab technical writing assistance application that was used by **125+** lab personnel.
- Responsible for the structure of the home page, search page, and implementation of the search engine
- Demoed progress 13 times to lab peers and the lab director.

SAT Math Tutor | Self Employment | August 2022 – Current
- Tutored a student on algebra, geometry, and trigonometry fundamentals for 8 hours every month

LEADERSHIP EXPERIENCE
Project Lead | Husky Coding Project - Java Game Engine | September 2022 – Current
- Led an 8-person team to develop a game engine using Java.
- Demoed features approximately 18 times throughout the year during the club's weekly meetings
- Responsible for motivating team members, preparing for team meetings, scheduling team meetings, and researching Java frameworks and technologies.

PROJECT EXPERIENCE
Game Engine | Husky Coding Project | September 2022 - Current
- Developed two desktop games to learn game development as a prerequisite to developing a game engine.
- Created entirely using **Java**, using **JavaFX** as the main GUI framework to handle all rendering and user interactions.
- Capable of rendering multiple objects by using canvas layers and threads to handle all timing, updates, and redrawing.

Arduino Madlib Generator | June 2023
- Developed a Madlib generator using **Arduino**, **C/C++**, **Python**, **ChatGPT**, and various hardware components
- Users choose 5 descriptive words from a list of adjectives using a hardware interface which would return a Madlib string about the user onto the display

File Search Engine Web Server | August 2023
- Built a web server entirely in **C/C++** that searches and ranks documents depending on a user's query.
- Able to serve multiple clients using **threads** to access shared memory in parallel
- Handles both search queries and HTML requests