Noah Crouch

253-459-5948 | bjoonho@outlook.com | linkedin.com/in/noah-crouch/ | github.com/ncrouch1

Technical Skills

Languages: Java, C++/C, Python, TypeScript/JavaScript, Rust, SQL
Frameworks: Spring Boot, Spark Java, React, Django
Developer Tools: Git, Github, Relational Databases, Non-Relational Databases, Junit, Maven, Gradle, Google Suite, GNU Compilers and Debuggers, Valgrind, Figma, Node Package Manager, Yarn, Poetry, Cargo
Developer Platforms: Linux (Ubuntu and Windows Subsystem for Linux), Windows, Jupyter Notebooks, Google Colab, Android
Libraries: TensorFlow (Java and Python), JavaFX, Java Swing GUI

Relevant Work/Internship Experience

Undergraduate Research Assistant Mar. 2023 – Dec. 2023
Univ. of Wash. Ubiquitous Computing Lab *Seattle, WA*

- Applied the scientific method in researching and engineering new solutions in assistive medical technologies.
- Used **CAD software** and **3D printers** to engineer and prototype **over one hundred** eye drop application devices.
- Prepared scientific documents, performed preliminary research, and searched for supporting information related to different musculoskeletal impairments.

Front End Engineer Nov. 2022 – Mar. 2023
Univ. of Wash. Sensors Energy and Automation Lab *Seattle, WA*

- Utilized **Figma** in drafting web page designs for both the home and search engine pages.
- Used **JavaScript** and **React** to implement the designs and construct an API linking the front end to the **Django** back-end service.

Lead Game/User Interface Engineer, Project Manager Sep. 2022 – Oct. 2023
Husky Coding Project, Configurable Pacman Project *Seattle, WA*

- **Held consistent stand-up meetings** to **draft new project plans and documentation** and brief the team of current product development statuses
- **Mentored team members** by **encouraging them to program together**, **reviewing their programming commits** in 1on1 meetings, and **holding team events** outside regular working time.
- **Researched core project infrastructure** throughout the project related to the Java programming language, game development practices, and Java-based User Interface implementations.
- Responsible for around **60**% of all programming commits spanning areas in **event driven back end logic**, **Ghost AI and path finding**, **Map interactions in editing and while playing the game**, **core graphical user interface components**, and **key game logic**.

Relevant Projects

Quizlet-like Web Application | *Spring Boot, CassandraDB, Docker, Kubernetes, React, AWS* Mar. 2024 – Current

- Utilized **Spring Boot MVC** and **React** knowledge in creating a web application to learn **CassandrDB** via **DataStax Astra**, **Docker**, **Kubernetes**, and **Amazon Web Services**
- Created a RESTful micro-service hosted on AWS with exposed endpoints allowing the creation and manipulation of Quizlet decks for use in custom web games.

F.A.S.T | *Java/Kotlin, Python, TensorFlow, Twilio, Google Colab, Android* Sep. 2023 – Dec. 2023

- Led a team of 4 to create a discrete data-safe wearable to ensure the safety and well-being of elderly people and their families.
- Utilized **Google Colab** and Python to plot our negatively and positively associated falling data in 3 dimensions using the **Matplotlib** package to set necessary lower bound thresholds.
- Created a Java Webserver to host a **TensorFlow** model using the TensorFlow Java API and wrote a function to send a text message using the Twilio Developer API to a stored phone number.

Education

University of Washington Dec. 2023
Bachelor of Science in ***Electrical *And Computer* Engineering****, Embedded Systems Concentration* *Seattle, WA*

- Dean's List: Fall 2022, Spring 2023, Fall 2023