

Freya LaLuna

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EDUCATION

Colorado State University
Bachelor of Science in Computer Science

Fort Collins, CO
May 2023

- GPA: 3.84
- Dean's List Fall 2021 - Spring 2023

WORK EXPERIENCE

Mozilla Open-Source Contributor | *C++, Javascript*
Outreachy

Nov. 2023 – Apr. 2024

- Selected as one of 5 software development interns internationally to contribute to the Firefox open-source codebase under the guidance of mentors at Mozilla
- Brought the Firefox browser's reporting API up to modern W3C standards and re-enabled it, as it had previously been disabled due to a lack of maintenance
- Introduced measures within the C++ backend to process modern reporting directives while maintaining backwards compatibility with older reporting standards

Data Structures Teaching Assistant | *C++, Leadership*
Colorado School of Mines

Aug. 2018 – Sep. 2020
Golden, CO

- Provided guidance on programming and data structures fundamentals, helped students frame complex problems in solvable ways, and provided feedback on assignments during weekly office hours
- Co-led weekly lab sections for 100+ students, who we guided through C++ coding exercises that served to solidify the concepts they had learned in lecture

ACADEMIC PROJECTS

Project Management Web App | *Java, React, MySQL*

Jan. 2023 - May 2023

- Collaborated with four other students to create a web app which allowed for users to create, organize, and manage projects using a Java backend and React frontend
- Utilized test-driven development throughout the entire development process, with strong test packages being developed alongside each sprint's code implementation
- Implemented automated testing, test reporting, and mutation testing to streamline the testing process and strengthen our test suite

Circuit Learning in a Virtual Environment | *C#, Unity*

Jan. 2023 – May 2023

- Researched the efficacy of different types of written annotations for delivering learning concepts in an educational tool for building circuits
- Created rapid prototype iterations of a virtual circuit lab in Unity, utilizing C# for circuit and annotation logic
- Researched and synthesized preexisting literature on gamified learning, techniques for teaching circuitry concepts, and the effects of various styles of annotations on learning in physical and virtual environments to refine the presentation of the finalized circuit lab
- Collected data from participants' performance within the virtual circuit lab, and found that our results were not statistically significant

Asynchronous Chess Web App | *Java, React, MySQL, Node.js*

Aug. 2022 – Dec. 2022

- Collaborated with four other students to develop a full-stack web application utilizing Java and a REST API to power a React frontend, enabling seamless asynchronous chess games between players
- Worked alongside another student to create the React frontend, including login page, page navigation, chess logic, and a friends list
- Assisted another student in the creation and structure of our MySQL database, including implementing queries related to chess piece movement and board status in Java
- Implemented chess logic and unit testing for two of the six chess piece objects in Java (Queen and Pawn)
- Parsed user stories from a customer testimony, subdivided stories into tasks within a domain model, and utilized Agile methodologies to efficiently complete said tasks