JOANNA GILBERT

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SKILLS

JavaScript, Python, C++, React, Redux, Sequelize, Express JS, Flask, SQLAlchemy, HTML, CSS, SQL, AutoCAD

PROJECTS

Audio Stratus | *(React/Redux, JavaScript, Express.js, HTML5, CSS, AWS, Heroku)*   **live** | **github**

A SoundCloud clone where users can upload and discover music, post comments, like songs, and visualize audio.
- Developed backend routes to create, read, update, and delete using Express.js and Sequelize.
- Configured a Node.js backend to interact with a Heroku PostgreSQL database by using Sequelize model relationships, validations, and data retrieval.
- Utilized web audio API for audio visualization by manipulating sound in the browser with JavaScript.

localXP | *(React/Redux, Python, Flask, HTML5, CSS, AWS, Heroku)*   **live** | **github**

An Airbnb clone where users can discover, host, and book experiences, upload images, create available time slots, and leave reviews.
- Developed backend routes to create, read, update, and delete using Flask and SQLAlchemy.
- Utilized AWS S3 to store image files, ensuring security, scalability, and reduced server load.
- Utilized Redux's immutable object tree and functional, reactive programming, in order to manage state, the flow of data, and help simplify React components.

Disco-ord | *(React/Redux, Python, Flask, HTML5, CSS, AWS, WebSockets, Render)*   **live** | **github**

A Discord clone where users can join and create topic-based servers, explore channels, and send real-time messages.
- Showcased the ability to work on a team in an Agile development environment and successfully deliver a fully functional project with four features over the course of a 1-week sprint.
- Experience working with Git for version control in a collaborative team environment, creating pull requests and performing code reviews.
- Organized and allocated work amongst the team by creating new issues for tasks on GitHub with corresponding branches.

EXPERIENCE

Structural Engineer I   Aug 2021 - June 2022
Structural Engineering Intern   Feb 2019 - Dec 2019
Graf Engineering
- Designed foundations using the Load and Resistance Factor Design method, taking into account various load cases, including dead, live, and environmental loads to determine the capacity of the foundation to resist them.
- Utilized ENERCALC, ForteWEB, and EXCEL software to calculate the design loads for foundations and floor framing.
- Performed site inspections for footings, wall steel, shear wall inspections, and warranty level surveys.
- Communicated with construction crews to ensure requirements were met for footings and wall steel.
- Performed on-site calculations and adjustments to footings to account for variations in elevation between the plan and the excavated site to ensure foundation bearing capacities were met.
- Engineered lot specific layouts for residential projects using AutoCAD and updated plans to reflect architectural revisions and ASCE 7-10 code updates.

Independent Respite Caregiver, *Self-Employed*   Oct 2018 - Mar 2021
- Provided specialized care to children with mental illness and special needs.
- Developed a treatment plan with a licensed behavioral therapist to teach children social responsibility, work towards goals, and reported monthly progress to the care team coordinator.

EDUCATION

App Academy - Full-stack software engineering program, December 2022
Colorado School of Mines - *Bachelor of Science in Civil Engineering, December 2019*