

# SAVANNAH RICE

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[PORTFOLIO](#)

[GITHUB](#)

[LINKEDIN](#)

## SKILLS

React, Redux, Javascript, HTML5, CSS, SQL, Node.js, Python, Flask, SQLAlchemy, PostgreSQL, Git, Sequelize, AWS, Docker, Express

## PROJECTS

**VELOCITY** - A cycling and run mapping app created with React, Redux, JavaScript, Flask, AWS, HTML5 and CSS3.

[live](#) | [github](#)

- Developed an intuitive form with React featuring field validations with Flask to allow a logged-in user to upload unlimited images and GPX files (hosted on **AWS S3**) to their personal account in order to post about their cycling or running workout.
- Created and optimized a method to read a GPX file and parse into an array of **5000+** latitude and longitude points uploaded as a serialized **JSON** object to **AWS S3**, then plotted using the **React Leaflet API** to render a map of a user's desired route.
- Implemented a 'follow' feature using a **SQLAlchemy** query to filter and retrieve a list of 'unfollowed' users, enhancing the overall **UI / UX** of the application.

**DOGHOUSE** - A clone of Airbnb specific to pet-friendly lodging created with React, Redux, JavaScript and Express.

[live](#) | [github](#)

- Created user authentication measures with **Express validation middleware** so only logged in users can make a reservation, or review a location they had previously reserved.
- Integrated the **Google Maps API** to dynamically show the location of a rental property on a map, allowing for a more interactive approach to booking a reservation.
- Designed an integrated booking system, featuring validations with **Express** verifying dates picked are consecutive and not previously selected.

**OVERSHARE** - A clone of Instagram that uses React, Redux, JavaScript, Flask, HTML5, and CSS3.

[live](#) | [github](#)

- Created dynamically rendering like/unlike and comment features with React / Redux by triggering a re-render on state change.
- Implemented AWS S3 functionality to store uploaded photos and allow photos to be easily reachable, and allow users to create unlimited new posts.
- Designed a self-referencing join table with **SQLAlchemy** to allow users to follow and unfollow other users.

## EXPERIENCE

**Environmental Health Specialist, Eastern Idaho Public Health**

**2017 - 2018**

- Streamlined soil analysis by developing a customized map with Google Maps reducing manual in-person inspections by **25%**.
- Developed an internal automated septic system sizing calculation program to ensure adequate wastewater treatment for commercial & family home septic systems.
- Improved site evaluation scheduling system, leading to quicker turnaround and the district's highest number of site evaluations to date.

**Environmental Health Specialist, Teton County Environmental Health**

**2017**

- Inspected all 75 resort pool facilities in Teton County to prevent chemical injuries linked to improper regulation of the acid/base system, burns caused by disfunction of heating elements, and disease outbreaks from bacterial contamination of pool water

**Research Laboratory Technician, Boise VA Medical Center**

**2015 - 2017**

- Created a program to calculate routine lab values to improve efficiency and accuracy, performing **statistical analysis** of data sets consisting of **5000+** data points and used a **multiple regression analysis model**.

**Laboratory Technician, Santa Cruz Biotechnology**

**2014**

- Utilized data visualization software to establish biological relevance to microarray data and developed new laboratory protocols which saved over 8 hours per week in lab work.

### ADDITIONAL EXPERIENCE

**Retail and Rental Supervisor - Jackson Hole Mountain Resort**

**2019 - 2020**

- Surpassed the season revenue goal by 30% and reduced operating costs by analyzing historical skier visitor data to determine the most cost efficient staffing levels while maintaining a customer satisfaction rating of 9.5+.

## PUBLICATIONS

- [Sub-lethal doses of surotomycin and vancomycin have similar effects on Clostridium difficile virulence factor production in vitro.](#)
- [Fidaxomicin reduces early toxin A and B production and sporulation in Clostridium difficile in vitro.](#)
- [The Comparative Efficacy of Antibiotics against Experimental Clostridium septicum Infection.](#)

## EDUCATION

**Full Stack Web Development** - App Academy, Spring 2021

**BS Chemistry, Minor Biomedical Engineering** - Boise State University, Spring 2014

Coursework in Multivariable and Vector Calculus, Computational Chemistry, and Biomedical Engineering