SAVANNAH RICE

(208) 949-1170   savannah.rice@gmail.com   **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 and field validations with Flask to allow a logged-in user to upload images and GPX files to their personal account in order to create a 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 through frontend and backend user validation 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 users to create new posts.
- Designed a self-referencing join table 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**
- Managed EPA compliant water quality laboratory operations and performed 1000+ tests on drinking water to identify contamination by E. coli and eliminate public health safety risks.
- Conducted field investigations of 20+ failing water systems in residential neighborhoods, commercial businesses, and Grand Teton National Park and reported water system data to the EPA to monitor compliance with federal regulations.
- Inspected all 75 public pool facilities in Teton County and advised pool operators on system maintenance and water chemistry challenges including managing bacteriological contamination and acid/base system.

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 full 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+ on monthly customer survey reports.

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