

# Tristan Allaman

## Software Engineer

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805-796-3802

[LinkedIn](#)

[GitHub](#)

[Portfolio](#)

## TECHNICAL SKILLS

Languages: JavaScript, Python, SQL, HTML5, CSS3

Frameworks/Libraries: React.js, Node.js, Redux, Express.js, Flask, Sequelize, SQLAlchemy, Playwright, PyTorch, Mocha

Tools/Technologies: Docker, PostgreSQL, SQLite3, Git, Linux, AWS S3, RESTful APIs, Microsoft Excel

## WORK EXPERIENCE

Skysense, *Software Engineer/Machine Learning Intern* - Richland, Washington

April 2024 - July 2024

- Designed and implemented enhancements to Skysense's public-facing website and app using HTML, SCSS, JavaScript, Pug, and Vue.js, resulting in a 15% increase in user engagement and a 20% boost in site traffic by creating dynamic web styling and improving map interactivity to elevate user experience and functionality.
- Developed and deployed advanced AI models and algorithms for crop and labor detection using deep learning, significantly increasing the accuracy of plant stand counts by 25% and worker management for various crops.
- Assisted in creating a weed diameter filter for Skysense's analytics app, enabling critical precise identification and tracking of emergent weed growth for farm management.

Inspire Diagnostics, *EMT* - Santa Cruz, CA

March 2022 - March 2023

- Administered COVID-19 tests, ensuring accurate and efficient processing for patients while providing support.
- Operated as a standby EMT, delivering EpiPens to patients experiencing adverse reactions after COVID-19 vaccine administration. Adhered to PPE protocols to ensure compliance with health guidelines.

Central Coast Ambulance, *EMT* - Santa Cruz, CA

September 2021 - April 2022

- Administered Basic Life Support (BLS) procedures, including CPR, airway management, and hemorrhage control, to stabilize patients in emergency situations.

## PROJECTS

Rescue Ready (Javascript, HTML5, CSS3, React, Redux, Flask, SQLAlchemy, PostgreSQL, Python)

[Live Site](#) | [Github](#)

*A flashcard and quiz application for EMT students studying for the NREMT exam*

- Engineered the backend using Python and Flask, managing data workflows, user authentication processes and establishing RESTful API endpoints to support full-scale CRUD actions.
- Incorporated SQLAlchemy as an ORM for efficient database queries, including functionality such as eager and lazy loading to expedite the user experience and overall performance of the application
- Implemented FlaskWTForms along with react validation logic enabling users to CRUD their own flashcards, flashcard sets and quizzes promising a personalized study experience. Integrated a dynamic search bar.

Tristan's Travels (Javascript, HTML5, CSS3, React, Redux, Express, Sequelize, PostgreSQL)

[Live Site](#) | [Github](#)

*An "AirBnB" clone that enables users to create and manage listings and share their thoughts through reviews.*

- Developed efficient data storage and management solutions by leveraging Sequelize for SQL database interaction and implemented robust data fetching techniques to integrate RESTful APIs using JavaScript.
- Enhanced development process by utilizing Postman for data validation, endpoint testing, debugging and troubleshooting, which improved accuracy, reliability and user experience (UX).
- Strengthened application security and reliability by implementing Express validation middleware to validate incoming requests, ensuring data integrity and consistency.

Pledge Palooza (Flask, SQLAlchemy, JavaScript, React, Redux, HTML, AWS and CSS3)

[Live Site](#) | [Github](#)

*A crowdfunding application inspired by Kickstarter in which users can create, like and back projects and receive rewards.*

- Integrated a Flask backend with WTForms along with React frontend validation logic simplifying the process of using forms to ensure smooth user posting permissions
- Employed elaborate CSS techniques such as Flexbox and Grid to craft a user-friendly interface. Ensured seamless navigation through implementing react components, guaranteeing user satisfaction by creating a dynamic, responsive interface.
- Leveraged Redux for centralized state management, ensuring consistent data flow and smooth updates across the application for an elevated user experience.

## EDUCATION

APP ACADEMY Part-Time Online

November 2022- November 2023

- A rigorous and immersive full-stack software engineering bootcamp with a <5% acceptance rate. 1000+ hours of full-stack development modules with emphasis on project-based learning, pair-programming, and OOP.

UC Santa Cruz Santa Cruz, CA

September 2017- June 2021

- Biology, University of California, Santa Cruz