JOY O'HALLORAN

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SOFTWARE ENGINEER

LANGUAGES: Javascript, Python   **TOOLS:** Node.js, Git, Postman, Chrome Dev Tools
FRAMEWORKS: Express.js, Sequelize, Flask, SQLAlchemy, Alembic, React, Redux, Recharts, Discord.js

PROJECT EXPERIENCE

TATTERPIG • *Node.js* • *Express.js* • *Sequelize* • *PostgreSQL* • *React* • *Redux*   **Live** • **Code**
- Implemented auto-focus with Document Object Model manipulation via React synthetic events for a more seamless and intuitive user experience.
- Applied custom request-body validation using express-validator middleware for PUT requests to ensure compliance with HTTP standard.
- Configured React Router to parse and render content based on URL query parameters, fixing a bug that would otherwise have required substantial refactoring.

BUDGETME • *Flask* • *SQLAlchemy* • *Alembic* • *PostgreSQL* • *React* • *Redux* • *Recharts*   **Live** • **Code**
- Built a responsive line graph using Recharts, allowing users to quickly compare spending to budget goals.
- Wrote backend web API with Flask following RESTful conventions, allowing easier collaboration between developers.
- Composed two custom to-dictionary methods per SQLAlchemy model, allowing the backend to conveniently send JSON response bodies while avoiding infinite recursion from table relationships.
- Generated database migrations with Alembic, allowing developers to track database version history.

WATERBNB • *Node.js* • *Express.js* • *Sequelize* • *PostgreSQL* • *React* • *Redux*   **Live** • **Code**
- Added Redux thunk middleware to handle asynchronous database calls on the frontend, enabling the use of a store for temporary frontend data storage.
- Returned custom API error messages using Sequelize model validations and Express error-handling middleware, creating a consistent and reliable foundation for the frontend to be built upon.

MOMO • *Node.js* • *Discord.js* • *Sequelize* • *PostgreSQL*   **Code**
- Designed a message template using Discord.js embeds to create more visually appealing outputs for users.
- Created a custom Sequelize-model-querying function to reduce the boilerplate code needed for additional features.

WORK EXPERIENCE

DATA ENTRY SPECIALIST • *Annie's Annuals and Perennials* • Richmond, CA   **August 2022 – May 2024**
- Created Excel spreadsheets and macros to automate repetitive tasks, reducing time spent on data entry by ~35%.
- Led initiative to improve product labeling, saving thousands of dollars in R&D costs over the subsequent year.
- Ensured accuracy and consistency of product data across multiple tracking systems via manual cross-checking.

TAX PREPARER • *Sovos* • Wilmington, MA (remote)   **November 2020 – November 2021**
- Used custom software to prepare and file multi-state sales and use tax returns for 4–6 clients per month.
- Communicated with clients via Salesforce portal to gather information, address questions, and facilitate on-time filings.
- Documented client-specific processes in detail, ensuring consistency of service and smooth handoffs between preparers.

EDUCATION

APP ACADEMY • Full Stack Web Development   **2024**
- Programming fundamentals, data structures, and asynchronous code
- HTML, CSS, the Document Object Model, HTTP, the request/response cycle, and REST APIs
- Rapid acquisition of new technologies, including frameworks for both backend and frontend development

UNIVERSITY OF MASSACHUSETTS, BOSTON • *Bachelor of Arts in English* • 3.97 GPA • Boston, MA   **2018 – 2020**