

(801) 541-6884 shawn.boyle01@gmail.com PORTFOLIO GITHUB LINKEDIN

SKILLS J

JavaScript / Python / React / Redux / Node.js / Flask / Express / SQLAlchemy / HTML5 / CSS3 / PostgreSQL / Docker

TECHNICAL PROJECT EXPERIENCE

PROGRAMMATIC | Group Project

Live Site | GitHub

A developer's education application built with React, Redux, Flask-SQLAlchemy, AWS S3, PostgreSQL, Docker

- Engineered a visualization of **Dijkstra's Algorithm** by calculating the shortest path for a weighted graph of nodes, rendering the graph and edges between the nodes with a **CSS** grid and **React**, allowing for an animation of the traversal and shortest path for an enhanced **UI/UX**.
- Programmed a fluent search algorithm with **React** to match user queries with comprehensive filtering, returning results utilizing the **useLocation hook** for accurate DOM rendering.
- Developed a seamless, responsive discussion section for users to read feedback as well as engage in discussion by creating, editing, or deleting their comments utilizing **React / Redux** to manipulate the front-end dynamically and efficiently.

ZOOLODEX | Solo Project <u>Live Site</u> | <u>GitHub</u>

An educational nature and wildlife platform using React, Redux, Flask-SQLAlchemy, AWS S3, PostgreSQL, Docker

- Integrated **Google Maps API** for users to explore geographical locations, having the coordinates be associated with seeded regions, soon allowing users to upload and view events with markers on the map.
- Designed a responsive navigation bar utilizing React and CSS to adjust styling conditionally when the Y coordinate scroll
 amount of the window object surpasses page image headers, providing a visually appealing UI/UX.
- Constructed a fluent backend Flask-SQLAlchemy server, handling comprehensive validations for user authentication and
 AWS S3 uploads, then providing that data to the PostgreSQL database, wrapping all data for deployment with Docker.

CRESCENDO | Solo Project Live Site | GitHub

A spotify clone prioritizing music organization utilizing React, Redux, Node.js, Express, Sequelize, AWS S3, PostgreSQL

- Developed a relational database with 12 tables held by PostgreSQL, which I queried on the Node.js backend's Express server with the Sequelize ORM, allowing server data to have clarity and accessibility.
- Utilized the audio element to construct a feature-rich audio player, maintaining audio controls throughout the website with dynamic progress tracking.
- Formed a cohesive **Redux** store through efficient **API** queries, cutting down on server load and resulting in a quick, optimal load time for data rendered on the frontend with **React**.

GOODGAMEZ | Group Project

<u>Live Site</u> | <u>GitHub</u>

A GoodReads clone for video games using JavaScript, Pug, Node.js, Express, Sequelize, PostgreSQL

- Dynamically rendered user feedback by utilizing AJAX principles, building several scripts for sending API fetch calls to the
 PostgreSQL database to store the feedback, which is returned to the Express backend and rendered immediately with basic
 JavaScript and HTML, resulting in a responsive user experience.
- Implemented backend user authentication and user security with **Express** routes, custom validators, and security libraries, protecting against **CSRF** attacks and storing passwords with the **bcryptjs** hashing algorithm on signup.
- Ensured DRY and reusable code with Pug mixin fields for user auth forms, which are provided form data with JavaScript.

RELEVANT WORK EXPERIENCE

L1 Technical Support Engineer | *Instructure*

May 2020 - Dec 2020

- Assisted students, teachers, and admins over the phone or live chat to resolve 80+ cases per 20 hour weeks on the Canvas
 platform, by navigating a thorough troubleshooting process centralized around known bugs and common issues.
- Utilized several **Canvas** technologies and extensions to parse student activity data in **JSON**, replicate existing bugged environments for **testing and debugging**, and assist in implementing external API's into our system for teachers' utilization.
- Communicated with my team weekly to discuss goals and milestones, utilizing feedback to maximize performance.

FDUCATION

- Rigorous 1000-hour software development course with <3% acceptance rate
- Topics include: **TDD (Test Driven Development)**, scalability, algorithms, **OOP (Object Oriented Programming)**, coding style, **REST**, security, single-page apps, pair programming, design patterns, and web development/coding best practices.