

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

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

## TECHNICAL PROJECT EXPERIENCE

PROGRAMMATIC | Group Project built with React, Redux, Flask-SQLAlchemy, AWS S3, PostgreSQL, Docker

Live Site | GitHub

- 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 using React, Redux, Flask-SQLAlchemy, AWS S3, PostgreSQL, Docker

Live Site | GitHub

- 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 utilizing React, Redux, Node.js, Express, Sequelize, AWS S3, PostgreSQL

Live Site | GitHub

- 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 using JavaScript, Pug, Node.js, Express, Sequelize, PostgreSQL

Live Site | GitHub

- 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.
- Demonstrated strong communication with the team weekly by discussing goals and milestones and utilizing feedback to maximize performance.

# **EDUCATION**

### App Academy | Full- Stack Web Development

Oct 2021

- Rigorous 1000-hour software development course with <3% acceptance rate</li>
- 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.