

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

SKILLS JavaScript / Pytho

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

## RELEVANT WORK EXPERIENCE

Junior Software Engineer | Flapmax (Contract)

Nov 2021 - Dec 2021

- Engineered optimization for AI models via FastAPI for RESTful routes to validate the models, then running automated tests
  on Azure Virtual Machines to measure and optimize output, resulting in improved throughput, latency, and memory
  footprint, while maintaining accuracy.
- Constructed an intuitive, comprehensive **frontend UI** through **React**, allowing clients to upload and optimize models, then displaying data through rendered charts and statistics, providing clients with clarifying data and an enhanced product.
- Integrated Azure cloud storage services for PostgreSQL and MongoDB providing SQL and NoSQL storage, allowing for
  efficient, flexible data management for our backend API.

### **L1 Technical Support Engineer** | *Instructure*

May 2020 - Dec 2020

- Utilized internal Canvas technologies to troubleshoot **API** integrations into virtual classrooms by replicating bugged environments for **testing and debugging**, then communicating and applying a fix to live environments.
- Assisted admins, teachers, and students to resolve 80+ tickets per 20 hour weeks on the Canvas platform, by navigating a thorough troubleshooting process centralized around various bugs and common issues.
- Demonstrated strong communication skills through weekly team and one-on-one meetings by proactively discussing current bugs and outages, setting SMART goals, and requesting feedback to maximize performance.

# 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 with a **React/CSS** grid, then animating 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 regions seeded by coordinates.
- 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, application-wide song player, giving users audio progress and extensive controls over the current playlist, album, artist, or song.
- 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**.

# **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)**, **REST API's**, security, single-page apps, pair programming, coding style, design patterns, and web development best practices.