

Jay Spencer

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Skills

Python3, JavaScript, PHP, Laravel, Mocha, Express, GraphQL, MySQL, Arango, HTML5, CSS3, Vue, React.js

Summary

Budding junior software developer with a penchant for critical thinking. Highly skilled in seeking out answers to project-related questions. Filled with a desire to learn and ultimately serve as an invaluable team member.

Experience

Software Developer | March 2022 - June 2023 | Naturescape Inc

- Formulated end-to-end tests with **Mocha testing framework** to ensure proper functionality at API endpoints.
- Generated and executed **manual testing** criteria to ensure proper functionality of frontend interfaces.
- Devised and tested **MySQL** and **ArangoDB (NOSQL)** queries to deliver data to users efficiently.
- Constructed an in-house ticketing system in **GraphQL** leading to increased communication between branches and corporate.
- Leveraged **RocketChat API** to send automated messages notifying employees of new tickets.
- Collaborated with team members to **construct JSON schemas** for a course system used to ensure employees have the knowledge necessary to perform their jobs effectively.
- Implemented an algorithm to calculate customer finance charges on a monthly basis, **lowering company expenditures** by completing a task that required hours of manual labor in seconds.

Graduate Research Assistant | January 2018 - August 2021 | University of Alabama in Huntsville

- Created a workflow with **Python** implementing pre-existing tools to automatically design *Streptococcus pyogenes* (Strep A) vaccine candidates.
- Formulated **regular expressions** in **Python** to extract protein sequences from > 100 files containing data on Strep A isolates.
- Developed a **Selenium** script to automate the submission of protein sequences to a web server and collect the results. The script **increased efficiency** by reducing the time to collect the data from hours to minutes.

Personal Project

Noted

[live site](#) | [github](#)

HTML5, CSS3, Bootstrap5, Vue3/Pinia, Laravel, Eloquent, Digital Ocean

A spaced-repetition notecard app that sends daily review reminders via email.

- Created a **CRON job** to generate daily review notecards and email users when they are ready.
- Implemented code syntax highlighting in notecards via the **highlight.js** NPM package.
- Utilized **VueQuill** as a rich-text editor component for notecards.

Education

App Academy | February 2022 | New York, NY

Immersive software development course with focus on full stack web development.

University of Alabama in Huntsville | PhD in Biotechnology Science & Engineering | August 2021 |

Huntsville, AL

University of Tennessee Knoxville | BS in Biochemistry Cellular and Molecular Biology |

December 2017 | Knoxville, TN