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Versatile Full-Stack Software Engineer with a Masters of Fine Arts in Interactive Media Development, focusing on programming. Skilled in Java, C#, JavaScript, Python, and C++. Fast Learning capabilities for any programming language required for a project. Always looking forward to learning more techniques, libraries, and skills required to complete a project in an efficient manner.

## SKILLS:

Javascript, Java, Python, C++, C#, English, SQL, PostgreSQL, Flask, Express, Node.js, React, npm, nvm, Docker, Git, AWS, SQLAlchemy, Alembic, Postman, Mocha, Chai, Pair Programming, Test-Driven Development (TDD), Object-Oriented Programming (OOP)

## PROJECT EXPERIENCE

**ELot** >> Flask, React, Docker, AWS, Redux

GitHub > Live

- Designed PostgreSQL schema for products, articles, reviews, and transactions to create a storefront/social site to share and sell the latest game releases.
- Stored images in AWS to have a reliable reference for images to be displayed on product listings and posted articles, preventing image display errors.
- Implemented a user profile page using React and Redux to see products, articles, average rating as a seller, and reviews that have been made by the user from a Flask backend.
- Designed a dummy shipping system using datetime with sqlalchemy and base python to check current server time since the last update, to simulate a processed, shipped, and delivered package, to show multiple states of the website.

HeapLeak >> Flask, React, Redux, Docker

GitHub > Live

- Designed the Flask models, to allow data to be sent, received, and saved using the Flask backend.
- Compressed data in the Flask Backend to singular routes to allow the currently logged in user to manage Questions, Answers, and Saved Questions the user owns.
- Developed a system in React to track tags when creating or updating a post, dynamically verifying if the tags are already applied when updating a question, ensuring proper tracking for sending data to the Flask backend API.
- Implemented search and display functionality on the homepage using React and Redux, to allow users to search for questions based on the title, body, and tags of all questions currently in the redux store.
- Provided a popularity display using React and Redux, to allow efficient access to the most popular question on the site based on how many answers a question has received from the homepage

Spaceholder >> Unity, OpenXR

GitHub > Live

- Designed AI and tracking to chase and target the player's center of mass in Unity C# supplemented by AStar AI navigation.
- Modified AStar to create procedural navmesh maps as the game runs and new levels are generated procedurally.
- Implemented a hitbox system in Unity C# to allow players to move and dodge bullets fired at them by the AI.
- Designed a voiceover by modifying recorded audio in audacity and timing it to OpenXR interaction events system to allow tutorials when a player picks up a new weapon type.
- Implemented a two hand weapon system in OpenXR to better enable players to aim larger weapons.
- Presented at Pax East 2023 on the main show floor at a Clark University booth.

## **EDUCATION**

APP ACADEMY >> Full Stack Web Development

**Completed August 2024** 

CLARK UNIVERSITY >> Master of Fine Arts in Interactive Media >> Worcester, MA

**Completed May 2023** 

**BECKER COLLEGE, CLARK UNIVERSITY** >> Bachelor of Fine Arts in Interactive Media >> Worcester, MA

**Completed May 2022**