OWEN DONOHUE

SOFTWARE ENGINEER

CONTACT

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Owenpdonohue@gmail.com

EDUCATION

Sonoma State University

Bachelor of Science in Computer Science

EXPERIENCE

Full-Stack Developer | 2024

Senior Project

- Conceptualized and led the development of a full-stack React application that allows users to manage account and character data for the MMORPG World of Warcraft, facilitating team creation and strategic planning.
- Integrated the Blizzard API for seamless character data retrieval, enabling users to add characters to their accounts by entering a character name, and incorporated features for stat analysis, comparisons, and note-taking.
- Developed a secure RESTful API using Node.js and Express.js, designed with robust JWT-based authentication to ensure secure access to user data.
- Implemented authentication and authorization flows, enabling account creation, secure login/logout, and role-based permissions for data management.
- Deployed the backend on a scalable AWS-hosted SQL server, ensuring high availability, data integrity, and optimized database queries for smooth operations.
- Built an intuitive and responsive React.js front-end with Material-UI, delivering a user-friendly interface that enhances user engagement and functionality.
- Employed state management libraries and asynchronous programming techniques to ensure seamless real-time interactions between the client and server.

Compiler Engineer | 2024

Sonoma State University

 Designed Interpreter for C-style language in C++. Interpreter consisted of 6 step process of removing comments, tokenizier, using a symbol table, abstract syntax tree, concrete syntax tree, and the final interpreter with a program counter

Data Analyst | 2023

Sonoma State University

 Developed a CNN and used algorithms to classify 80 GBs of public photos of a solar eclipse using Tensorflow and Keras libraries.

Music Tutor | 2020

Casa Grande High School

Helped others with developing performance skills and fundamentals in Jazz and Classical Trumpet

SKILLS AND PROGRAMMING LANGUAGES

Courses

 Algorithm Analysis, Computer Vision, React Development, Programming Languages, Statistics, Game Development

Programming Languages | Tools

 C, C#, C++, Python, HTML, JavaScript, Visual Studio, Jupyter Notebooks, MySQL, Github, Google Sheets

Awards and Honors

- o NorCal Honor Band | 2020
- o Scholarship for Music, Sonoma County Honor Band | 2016