Antonio Lu

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EDUCATION

OREGON INSTITUTE OF TECHNOLOGY   **3.82 GPA**

Bachelor of Science in Software Engineering   **2020 - 2024**

Relevant Courses: Advanced .NET, Machine Learning, Software Design Patterns, Database Systems and Designs, GUI Programming

EXPERIENCE

TRIMBLE   **PORTLAND, OR**

AI/ML Software Engineer Intern   **May 2024 – PRESENT**

- Independently developed an AI-driven application using OpenAI GPT-4 API, Python, SQL Server, and SQL Alchemy that combines machine learning, natural language processing, and database management to facilitate seamless natural language queries and custom report generation
- Created a chatbot web application using React, Node.js (JavaScript), and Flask (Python) that allows users to interact with the backend AI application to ask questions and receive data, ensuring an intuitive and user-friendly interface for natural language queries and data retrieval

MICROCHIP TECHNOLOGY   **GRESHAM, OR**

Full Stack Software Engineer Intern   **March 2022 – November 2023**

- Primary developer of a ASP.NET MVC (C#) web application that granted the manufacturing team autonomy in configuring their data entry and display pages. Resulted in 95% reduction in turnaround time for frequent updates, significantly accelerating engineering and manufacturing operations
- Architected and maintained SQL Server databases for 3 separate applications with SSMS
- Implemented REST API endpoints to facilitate seamless communication with other internal projects, enhancing interoperability within the company ecosystem
- Incorporated Agile methodology by utilizing Azure DevOps for sprint planning and team collaboration
- Provided support and guidance to new interns by setting up meetings to help facilitate onboarding process, integrate into new projects, address concerns and provide feedback

PROJECT

Ticket Tracker

- Independently developed a C# application that integrates the Seatgeek API to monitor ticket prices for over 500 concerts, gathering pricing information over time and storing it in an AWS RDS MySQL database
- Utilized Docker and AWS ECR to containerize the application, and AWS Lambda to automate and streamline data retrieval process, ensuring real-time event pricing information every four hours
- Developed an aesthetically pleasing and intuitive dynamic web application with ASP.NET MVC (C#)
- Employed SOLID principles, Unit of Work pattern, MVC pattern, and Repository patterns to ensure maintainability, scalability, and code quality

SKILLS

Languages: C#, C++, C, JavaScript, Python, HTML/CSS

Technologies: SQL Server, MySQL, jQuery, ASP.NET MVC, Blazor, Entity Framework, SQL Alchemy, Azure DevOps, AWS (Lambda, RDS, ECR, ECS, CloudWatch), LINQ, Bootstrap, Postman, Docker, Flask, Node.js, React, GPT-4 API

Spoken Language: English and Chinese

CERTIFICATIONS

JavaScript Algorithm and Data Structures   **Responsive Web Design**

FreeCodeCamp.org   FreeCodeCamp.org