

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 – Sep 2024

- 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.js, Node.js, and Flask that allows users to interact with the backend AI application to ask questions and receive data, ensuring an intuitive and user-friendly interface for input of natural language queries and display/export of data

MICROCHIP TECHNOLOGY

GRESHAM, OR

Full Stack Software Engineer Intern

Mar 2022 – Nov 2023

- Primary developer of a C# ASP.NET MVC web application that granted users autonomy in configuring their data entry and display pages. Resulted in a 95% reduction in turnaround time for frequent updates
- Reviewed and divided work items into actionable tasks with stakeholders, provided time estimates, and supported feature deployments while considering user and service impacts. Collaborated with stakeholders to define feature requirements, and established feedback loops to drive continuous improvement using customer metrics
- Applied coding standards and best practices through code reviews, wrote maintainable and extensible code with guidance, used debugging tools to proactively and reactively resolve issues, ensuring code quality and reliability
- Architected and maintained MySQL and SQL Server databases for multiple applications with SSMS
- Implemented REST API endpoints to facilitate seamless communication with other internal projects

PROJECT

Ticket Tracker

- Independently developed a C# ETL pipeline that integrates the SeatGeek API to monitor ticket prices for over 500 concerts, extracting, transforming, and loading pricing data into an AWS RDS PostgreSQL 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 C# ASP.NET MVC
- Employed SOLID principles, Unit of Work pattern, MVC pattern, and Repository patterns to ensure scalability, maintainability, and code quality

SKILLS

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

Technologies: SQL Server, MySQL, PostgreSQL, jQuery, SQL Alchemy, ASP.NET MVC, Blazor, Entity Framework,

AWS (Lambda, RDS, ECR, ECS, CloudWatch), LINQ, Bootstrap, Postman, Docker, Flask, Node.js, React, GPT-4 API

Spoken Languages: English and Chinese

CERTIFICATIONS

JavaScript Algorithm and Data Structures

FreeCodeCamp.org

Responsive Web Design

FreeCodeCamp.org