Corey New

https://corey-new.github.io/ | github.com/corey-new | Adaptive| Detail Oriented | Leadership | Relationship Builder

JUNIOR SOFTWARE ENGINEER

Software Developer with 2 years of experience in machine learning operations, full-stack application development, and data analytics. Skilled in building and deploying ML models, managing data pipelines, and optimizing cloud-based infrastructures. Experienced in developing scalable web applications, designing RESTful APIs, and integrating backend systems with edge devices.

EXPERIENCE

OMNIMED   **TUSTIN, CALIFORNIA**

JUNIOR SOFTWARE DEVELOPER, DATA ANALYST   **SEPTEMBER 2023 - FEBRUARY 2025**

- **Machine Learning Operations**
  - I led a team of data analysts in an active machine learning (human-in-the-loop) process to train a single stage detection model (YOLO & Darknet framework) to classify thousands of surgical instruments, operating room equipment, and a variety of workshop tools.
  - Assisted the development of machine learning models to production using Azure DevOps Pipelines.
  - Managed and processed data: collection, validation, blob storage, metrics, and visualizations.
  - Created pipeline components and used MLOPS features to help train ML models.
  - Maintained the system architecture of video data preparation and video training pipelines.
- **SmartOR Web Application**
  - Developed and maintained a web application using Angular (frontend) and C# .NET (backend & cloud API).
  - Designed and implemented REST API endpoints to support frontend features and backend business logic. Built and optimized dynamic pages and data views for improved user experience.
  - Wrote unit tests for both frontend (Jasmine/Karma) and backend to ensure code quality and reliability.
  - Managed SQL Server database schemas, including creating tables, and deployment scripts.
  - Integrated backend services to communicate with edge devices, ensuring data flow and device protocol.

SKILLS

- Agile, Scrum, XP, Restful API
- Java, Python, C, C++, C#, TypeScript, .NET, Node.js, Angular, MySQL, NoSQL, R
- Unix, Linux, MobaXTerm, Microsoft Azure, Azure Storage Explorer DevOps, Visual Studio, Git, Jira, Docker, Kubernetes
- Python SDK V2, TensorFlow, OpenCV, Pandas, NumPy, PyTorch, OpenTelemetry, Kafka

EDUCATION

CALIFORNIA STATE UNIVERSITY OF FULLERTON, CA   **AUGUST 2018 - AUGUST 2023**

BACHELOR OF SCIENCE - COMPUTER SCIENCE

PROJECTS

DISCORD BOT | Python, MySQL

- A Discord Bot that involves the Python Discord API with asynchronous functionality and embedded formats.
- The Discord API communicates to the mySQL database based on the user's request via configured commands.
- Custom command handler was implemented to help guide the user in using the API correctly and efficiently.

JOB POST WEBSITE | PHP, HTML, MySQL

- This locally hosted website was designed to read, create, update, and delete job posts based on user account.
- There is a database schema using mySQL Workbench database management system.
- Resources include Apache HTTP server to connect the database, PHP and Bootstrap to configure the front-end.