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EXPERIENCE

AI Singapore

Associate AI Engineer   **Nov 2024 – Jun 2025**

- Successfully delivered the first version of Project Aquarium, a collaborative initiative with Google and ASEAN stakeholders, aimed at increasing language representation within Southeast Asia.
- Led the design of the schema for a pgvector-extended PostgreSQL database to enable real-time semantic search across multilingual datasets within an agentic RAG system orchestrated with LangGraph.
- Developed and deployed over 15 Pydantic-validated REST API endpoints served with FastAPI, achieving 100% line coverage for standard query-response flows and <100ms average response latency on GCP.
- Leveraged Google Gen AI SDK to implement AI integrated data post-processing pipelines to enrich the quality of dataset metadata.
- Built a secure internal Streamlit CRUD app to manage 2000+ metadata entries, reducing manual data handling effort across the team by 80%.
- Developed dynamic React components integrated into a live production-grade NextJS webapp, enhancing UI responsiveness and modularity.

AI Apprentice   **Sep 2024 – Nov 2024**

- Completed a rigorous 9-weeks deep-skilling program that spanned various machine learning domains including Computer Vision and Natural Language Processing.
- Acquired hands-on experience with PySpark to process big data and MLFlow for model tracking.
- Engaged in multiple knowledge-sharing sessions with fellow apprentices, including demonstrating how Bayesian posteriors can be modelled to optimize model selection in response to data drift.
- Trained an object detection model using Ultralytics YOLOv11 to monitor snack pantry inventory in real time, reducing manual stock checks as part of the program capstone.
- Selected to mentor a new cohort on Time Series Analysis, following top 3 ranking in advanced statistical modelling assessments.

FDM Group

Software Developer   **Oct 2023 – May 2024**

- Collaborated with cross-regional teams (Singapore & Hong Kong) to develop Java based POCs using Spring Boot, Hibernate ORM, SQL, and React, demonstrating RESTful design and DB integration for simulated client apps.
- Leveraged Postman to automate API testing, and JUnit and Mockito for unit tests.
- Implemented automated actions using record-triggered flows as part of a Salesforce training capstone project.
- Actively applied Agile practices to enhance adaptability and project delivery efficiency.

EDUCATION

Nanyang Technological University, Singapore   **Aug 2018 – Dec 2022**
School of Physical and Mathematical Sciences

Bachelor of Science (Honours), Mathematics and Economics

CO-CURRICULAR ACTIVITIES & COMMUNITY SERVICES

Head of Logistics @ NTU Inline Skating Club   **2019**

Volunteer Tutor @ Taman Jurong Community Centre   **2019**

SKILLS

AI/ML Engineering – LangChain | PyTorch | TensorFlow | PySpark | MLFlow | Streamlit | Gradio
Backend – Python | FastAPI | SQLAlchemy | SQL (PostgreSQL, MySQL) | Java | Spring Boot | Hibernate
Frontend – React | NextJS | TanStack Router | Vite
DevOps/Tools – Git | Docker