Pavitran Tamilarasu

Experienced Data, Cloud and Al Engineer

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Relevant Experience

Data and LLM Engineer, Faculty Group May 2023 — Present

- Engineered an LLM-based tool that trains on various client data to produce specialized LLM instances, enabling personalized content creation for a diverse client base and content creation across multiple platforms
- Engineered a solution for embedding routing utilizing similarity search for identifying relevant vectorized embeddings, also incorporates automated knowledge base retraining to keep content relevant and up-to-date.

Professional Services Consultant, MIMOS Berhad Jan 2021 — June 2022

- Led a team of devs in a sales analytics project that integrated analytics, logistics monitoring, and accounting reporting to optimize business operations.
- Streamlined customer engagement through direct communication and regular meetings, conducted customer lifetime value (CLV) evaluations, and designed analytics solutions that synchronize real-time transaction from logistic and stock management.
- Oversaw the transition of production processes to a Kubernetes-managed environment, significantly enhancing the efficiency and reliability of development and production workflows.
- Involved in engineering a unified log analytics platform, for real-time visibility into syslogs, web server, and application logs for improved diagnostics and system health monitoring for on-premises infrastructure.

Project Engineer, MIMOS Berhad July 2019 — Dec 2020

- Played a key role in the development of COVID-19 vaccination distribution system for the Ministry of Health, a critical component of Malaysia's pandemic response strategy, required managing real-time, distributed data across a high-availability, redundant infrastructure.
- Orchestrated the integration of multifaceted data streams for real-time vaccination status monitoring directly supporting daily decision-making at the governmental level.
- Implemented geospatial analysis, utilizing satellite imagery from NASA Landsat and Sentinel and monitoring crop health, supporting the Department of Agriculture's agriculture efforts to maximize rice yields in West Malaysia.
- Applied spectral band data to quantify NDVI, leaf nitrogen content, and soil health, to provide critical insights into crop vitality and aid in precision agriculture.

Trainee, MIMOS Berhad Nov 2018 — Apr 2019

- Developed a real-time data pipeline utilizing MQTT for the Royal Malaysian Navy, streaming a vast array of sensor data to aid in maintenance of submarine operations.
- Implemented real-time reporting and visualization of streaming submarine sensor data in custom dashboards with live data ingestion.
- Contributed to the development of the MATRADE Trade Information System, focusing on database modeling and front-end development and support testing.

Skills

Technologies & Frameworks

Kafka, Spark, NiFi, MQTT, Flask, React, Powerbi, REST/GraphQL

Tools & Platforms

Elasticsearch, Kubernetes, AWS, GCP, Load-Balancing, CI/CD, Selenium, Langchain, LLamaIndex

Programming Languages

Python, JavaScript, Java, Scala, C#, Bash Programming, SQL

Education

BSc (Hons) in Computer Science

Graduated from Asia Pacific University with a CGPA of 3.5

Sijil Pelajaran Malaysia (SPM)

9As in the Malaysian High School Diploma

Selected Projects

Factory Distribution Chain

Designed a data analytics solution for a factory generating over 1 million in annual revenue. This is still being used in their day-to-day operations.

Entrepreneurial Experience

Co-founded a digital marketing firm, which generated over 140K USD in revenue in 2023.

Lead Acquisition Platform

Established a comprehensive portal aggregating over 350K NFT owners, designed as a pivotal resource for targeted marketing