

DYLAN NGUYEN

Melbourne, AU

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OBJECTIVE

Data and Software Engineer with 2+ years of experience **designing data pipelines** and **building full-stack applications**. Skilled in **Python**, **Golang**, and **TypeScript**, with expertise across **AWS**, **Azure**, and **GCP**. Strong background in **data engineering**, **backend development**, **optimisation algorithms**, **GenAI** and **ML integration** and **system design**. Seeking opportunities to deliver innovative, high-performance data and software solutions. Willing to relocate to any location.

EDUCATION

Master of Data Science - Swinburne University - GPA: 3.85/4	2024 - 2025
Bachelor of Logistics and Supply Chain - RMIT University - GPA: 3.1/4	2018 - 2022

SKILLS

Programming Languages	Python, Golang, TypeScript, JavaScript (ES6+)
Data Engineering	Apache Spark, Airflow, Kafka, dbt, ETL/ELT pipelines
Databases	PostgreSQL, SQL Server, MySQL, MongoDB, Redis, Neo4j
Cloud Platforms	AWS (S3/EC2/Lambda/RDS/Glue/Redshift), Azure (ADF/ADLS/Synapse)
Software Engineering	REST/GraphQL APIs, Design Patterns, CI/CD pipelines, Git, Testing
Soft Skills	Team Leadership, Cross-cultural Collaboration, Agile/Scrum

EXPERIENCE

Software Engineer - Internship TMR Global	July 2025 - Now <i>Melbourne, Australia</i>
<ul style="list-style-type: none">Convert business requirements into clear, actionable technical specifications, enabling efficient translation of product needs into engineering solutions.Design and validate application logic with the engineering team, contributing to the delivery of scalable and reliable product features.Collaborate closely with the Product Owner, Product Manager, and Tech Lead to ensure on-time, high-quality product delivery.Implement and test automation pipelines and application tasks using Next.js, TypeScript, and scheduled jobs, boosting delivery speed and reducing manual effort.	
Data Engineer - Singapore Aviation Company Project FPT Software	March 2023 - October 2024 <i>Hanoi, Vietnam</i>
<ul style="list-style-type: none">Engineered and optimised ETL pipelines with Talend, BigQuery and Airflow, resulting in a 70% reduction in job runtime and 90% less downtime, significantly improving data availability for business users.Redesigned and rebuilt reporting workflows in collaboration with Finance and Operations teams using SQL Server SSRS, cutting complex report load times by 50% and enhancing decision-making efficiency.Leveraged Terraform and custom dbt-like Python to generate, deploy and optimise transformation scripts for BigQuery.Actively contributed to internal knowledge sharing, documented, and introduced new technology for a team of 10+ engineers, fostering continuous learning and improving team-wide productivity.Implemented a combination of automated and manual data quality checks, ensuring high accuracy, reliability, and trustworthiness of reports and datasets delivered to end-users.	

Junior Data Engineer

FPT Software

Jan 2022 - March 2023

Hanoi, Vietnam

- Led small teams of 2–3 engineers to deliver Proof of Concepts and pilot projects, evaluating feasibility of new technologies and accelerating their adoption into existing systems.
- Automated recurring ETL tasks with **Python** and **SQL**, **reducing manual processing time by 60%** and freeing up team resources for higher-value work.
- Designed and deployed ETL pipelines using **Azure Data Factory** and **Synapse**, enabling automated report generation from structured and semi-structured data sources.
- Extracted and integrated data from diverse sources into the data lake staging zone using ETL tools (e.g., IICS–Cloud Integration).

PROJECTS

GenAI Onboarding Platform - Welkom - Unihack 2025

Next.js, DataStax, Langflow, OpenAI API

- Engineered a gamified onboarding platform to help international students overcome cultural barriers and social isolation.
- Built an **GenAI** chatbot leveraging LangChain and OpenAI GPT-4 to deliver personalised recommendations, event discovery, and interactive gamified challenges.
- Enhanced chatbot efficiency and reliability with **RAG**, **semantic search**, and **reranker models** for improved response accuracy.
- Evaluated multiple embedding models (OpenAI-text-ada-embeddings-002, Gemini-text-embedding-005, HuggingFace-Multilingual-E5-base) to benchmark retrieval quality and optimise performance.
- Engineered and deployed a full-stack chatbot solution within a **Next.js** backend and frontend, enabling seamless user interaction.

Smart Class Allocation Platform - Classforge

(Next.js, FastAPI, Neo4j, Redis, GNNs, OpenAI GPT)

- Developed backend services using **FastAPI**, **Neo4j**, and **Redis** for an AI-driven classroom allocation platform.
- Optimised system throughput with caching strategies and a distributed **Python RQ** worker cluster for large-scale computation.
- Designed and implemented **CP-SAT optimisation** and **social network analysis** to generate balanced student cohorts focused on wellness.
- Integrated a graph-based explainable AI chatbot using **GPT-4.5** and **LangGraph**, enabling interpretable student status assessments.

Book Review Platform - Beeker

(Go Gin, MySQL, Redis, Langflow)

- Built backend APIs with **Go Gin** and **MySQL** to manage and serve book titles.
- Implemented category-based recommendation features for personalised book suggestions.
- Integrated **Langflow** to enable semantic search, allowing users to find books from natural-language descriptions.
- Optimised query performance using **Redis** caching, reducing response times for frequent searches.

CERTIFICATION

AWS Cloud Practitioner

2023

Udacity Data Science

2023

REFERENCES

Mr. Rin Nguyen

Software Engineer - Falcon Finance

Mr. Luke Benson

Project Manager - TMR Global Founder

Mr. Khai Tran

Data Engineer - FPT Software