

Anas Tarek Qumhiyeh

Software engineer building ML infrastructure and data-intensive systems.
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Seeking software engineering roles in fintech, ML infrastructure, and data platforms.
40% production defects | +45% retrieval (Monash) | 100M-event capacity benchmark

EDUCATION

Bachelor of Engineering (Honours), Specialisation in Software Engineering

Monash University, Bandar Sunway, Selangor, Malaysia. First Class Honours.
Graduated May 2026. WAM 82.1 | CGPA 3.82.

EXPERIENCE

Full-stack AI Engineer, Monash University

Nov 2025 - Feb 2026 | LangGraph, Neo4j, FastAPI
▪ +45% retrieval accuracy - self-correcting Text-to-Cypher over a Neo4j graph of university regulations.
▪ Hybrid retrieval: embeddings plus multi-hop graph walks for prerequisites and credit-transfer.
▪ A graph-logic SLM distilled from that reasoning: 50% inference latency, contradictions surfaced for administrators.

Full-stack Engineer, Western Digital

Feb 2025 - Dec 2025 | Next.js, ASP.NET, PostgreSQL, Docker
▪ 40% manual oversight - lab dashboard with role-based access for 50+ staff.
▪ CRUD and analytics behind those roles.
▪ WebSocket to the lab's deep-learning model; shortest path between stations in under 100 ms on that dashboard path.

Software Engineer Intern, Setel

Jul 2025 - Dec 2025 | Docker, Kubernetes, MERN Stack, Swagger, NestJS
▪ Authorization and capture of stored payment methods on the payment engine.
▪ Checkout and capture documented so a new developer could follow the path without a walkthrough.
▪ 92.5% unit-test coverage on checkout and capture.
▪ 40% production defects on that path (separate observation, not claimed as the coverage's effect).

Project Engineer Intern, Petronas

Nov 2024 - Feb 2025 | MATLAB, Python, MathCAD
▪ Converted the department's MATLAB back-end to Python, replacing paid licences with free packages.
▪ Wrote user test cases for features after they reached production.
▪ Presented usability findings to department leadership.

SELECTED WORK

Veridian | Automatic lower-carbon infrastructure recommendation

MLOps Tradeoff Engine. Intercepts Terraform before the spike; recommends a lower-carbon compute configuration.

CircuitMindAI | PCB fault detection

PCB Inspection.

Multi-Agent GraphRAG | +35% retrieval accuracy

Policy-corpus retrieval.
Also: MirrorFi (Grand Prize Winner) | Financial Risk Predictor (0.87 AUC-ROC score) |
Distributed Lead Scorer (100M-event capacity benchmark) | SLM Distillation Engine (70B -> 3B student)

STACK

Languages: Python, TypeScript, Java, C/C++ | Infrastructure: Docker, Kubernetes, PostgreSQL, Neo4j, Kafka, AWS, FastAPI
ML: PyTorch, LangGraph, PySpark