



NIK ZULFAQAR BIN NIK AZHAN

Address: Kuala Lumpur, Malaysia
Phone: Available upon request
Email: nikzulfaqar678@gmail.com

LinkedIn: linkedin.com/in/nikzulfaqar
Website: nikzr.dev

SUMMARY

AI software engineer with expertise in building and shipping production-ready applications using harness and context engineering approaches, with a proven track record of delivering 9 projects on or ahead of schedule and consistently exceeding expectations, recognized with the MAHA Gold Award 2025, Mesiniaga's award for high achievers.

PROFESSIONAL EXPERIENCE

Associate Software Engineer

Mar 2024 - Present

Mesiniaga Berhad

- Built and refined reusable AI harnesses and context-engineering workflows that structured codebase context, documentation, and engineering decisions, reducing manual effort across development workflows by 90%.
- Built and deployed a machine learning-based workforce absence-prediction platform single-handedly, achieving 90% accuracy with LightGBM and 49+ engineered features, cutting 7-day workforce backfill planning from a week to minutes.
- Scaled the company's internal GenAI platform to 500+ employees across 10 departments, executing a zero-error live migration from MongoDB to PostgreSQL while introducing LightRAG retrieval, Redis caching, and department-level usage analytics.
- Eliminated a 4-business-day vendor dependency by reverse-engineering an undocumented carrier billing rule and replicating its behaviour in a FastAPI-based postpaid billing system.
- Reduced project discovery from 30 minutes of manual folder searching to seconds with natural-language hybrid search, combining vector and keyword retrieval with LLM-based relevance filtering and anti-hallucination safeguards.
- Automated the end-to-end generation of kick-off presentations from tender documents using n8n, reducing preparation time from 2 weeks to minutes.
- Owned the deployment and ongoing maintenance of 4 production applications on GCP, automated image builds and GHCR pushes to save 1-2 hours per deployment cycle, and consolidated 3 applications serving 12 clients into a single NOC connector.

Software Engineer Trainee

Aug 2023 - Feb 2024

Mesiniaga Berhad

- Built 13 backend modules end-to-end using Node.js, GraphQL, and MongoDB across two production systems, designing data models and schemas before implementing 42 mutations and 24 queries, and enforcing field-level access control through 66 GraphQL Shield rules.
- Optimized a major backend migration by eliminating API over-fetching through client-requested field selection and strengthening input validation across rewritten modules.
- Built an Automatic Number Plate Recognition (ANPR) system applying computer vision and YOLOv8 object detection to recognize vehicle plates from live video streams.

TECHNICAL SKILLS

- **AI / GenAI:** LangChain, DSPy, RAG, prompt engineering, context engineering, n8n agentic automation
- **Machine Learning:** LightGBM, XGBoost, CatBoost, feature engineering, ETL pipelines
- **Backend:** Python, FastAPI, Flask, Node.js, Express.js, GraphQL, REST, WebSockets
- **Frontend:** Vue, React, Nuxt.js, Tailwind CSS, HTML
- **Databases:** PostgreSQL, MySQL, MongoDB, Redis
- **Infrastructure:** Git, Docker, Google Cloud Platform, Nginx, Cloudflare, Linux (Ubuntu, Debian), Vercel
- **Embedded:** Arduino, ESP

PROJECTS

Layman-Based AI Development Harness	2026
• Structured codebase context, project rules, documentation, and workflows into a simple, consistent format for AI-assisted development. • Established production-ready coding guidelines in an easy-to-understand format, helping AI generate maintainable, consistent, and project-aligned code.	
SambungBelajarmu.ai	2025
• Built an AI-powered university course recommendation system that matches SPM graduates with programmes they are likely to excel in and find personally fulfilling, based on their strengths, interests, and preferences. • Personalized course recommendations through AI-driven analysis, helping students narrow down suitable study paths instead of manually comparing university programmes.	
Jobzone	2023
• Fraudulent-job-posting detection powered by a trained XGBoost model. • Automated the initial screening of job postings with 80% fraud-detection accuracy, enabling users to identify suspicious listings before applying.	
EyeBuddy	2023
• Dry-eye-syndrome detection mobile app implementing the CNN-based Break-Up Time (CNN-BUT) algorithm in Python/OpenCV, and Flutter. • Enabled portable dry-eye screening by translating a computer-vision assessment algorithm into a mobile application, reducing reliance on bulky clinical equipment for preliminary assessments in rural areas.	

ACHIEVEMENTS

• MAHA Gold Award 2025 (Mesiniaga Award for High Achievers) • MSU iReX 15.0 Gold Medalist 2023 • MSU Bachelor’s Degree First Class Honours Award	
--	--

CERTIFICATIONS

• Claude - Claude Certified Associate – Foundations (CCAO-F) • n8n - Professional AI Engineering (AI Agentic Automation via n8n) • LangChain - Develop LLM powered applications with LangChain • Kaggle - Machine Learning (Feature Engineering) • AWS - Fundamentals of Machine Learning and Artificial Intelligence • AWS - Responsible Artificial Intelligence Practices • Fano - Fano Technical Training (Callinter Deployment and Support)	
---	--

EDUCATION

Bachelor’s in Computer Science (Hons.)	2021 - 2024
<i>Management and Science University</i>	CGPA: 3.94
• 3x President’s List Awards • 5x Dean’s List Awards	
Foundation in Information Technology	2019 - 2020
<i>UNITAR International University</i>	CGPA: 3.86
• 3x Dean’s List Awards	

LANGUAGES

English: Proficiency	Malay: Native
-----------------------------	----------------------