# **Dang Khoa Le**

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#### **EDUCATION**

# **Swinburne University of Technology**

Software Engineer

#### **SKILLS**

Vietnamese, English, Mandarin

#### **PROJECTS**

# Triage Response: LLM-Driven Solution and Drone Medication Delivery

- \* Designed and implemented an LLM-driven AI emergency triage system (Whisper, Gemini, Qwen-VL) with full-stack architecture, trained on MIMIC-IV data.
- \* Delivered real-time voice-triggered alerts, clinical decision support, and secure, rapid drone medication delivery.

## **SkyLedge - Capstone Project**

- \* Developed and launched SkyLedge, an OBD-II predictive maintenance system that reduced fleet servicing costs by 15% through real-time data, cloud pipelines, and advanced fault prediction.
- \* Led a team of 4 to architect and implement the end-to-end solution, encompassing hardware integration, data processing, and a user-facing monitoring dashboard.

#### **Al Tutoring**

- \* Solely developed an AI tutoring web application leveraging multi-RAG LLMs (Gemini, Qwen) and custom KB embeddings to deliver personalized, curriculum-aligned instruction.
- \* Engineered a microservices architecture with Next.js, FastAPI, and MongoDB, integrating features such as level-based tutoring, automated grading, dynamic timetables, and content crawling.

#### **Medical Chatbot**

- \* Engineered an AI medical chatbot leveraging Gemini Pro 2.5 and a NodeRAG architecture with FAISS for real-time diagnosis and treatment.
- \* Integrated features like dynamic caching, multi-language support, and continuous model fine-tuning; deployed using FastAPI, NodeJS, and MongoDB.

#### **EXPERIENCE**

## **CPG Seedcom** — Data Science | Team Leader

June 2025 - September 2025

Led a 6-member Data Science team in developing a Vietnamese-language AI assistant, reducing manual workforce by up to 80%\*.

Engineered autonomous analytics, converting business questions into SQL queries (MySQL, Oracle\*) for sales, supply chain, and marketing insights.

Leveraged Chain-of-Thought, Agentic RAG, Reinforcement Learning, built with FastAPI, Gemini, Qwen3, and MongoDB vectorbase\*.

### Pythera — Al Engineer | Part-time

June 2025 - Now

Spearheaded development of an agentic RAG module, integrating Electronic Medical Records (EMR) for Clara, a national medical Al assistant, resulting in an [X]% improvement in diagnosis accuracy and [Y]% reduction in medication errors.

Designed and implemented intelligent chat memory retrieval, **boosting contextual continuity by [Z]%** across user interactions; optimized LLM performance through targeted training and rigorous benchmarking.

# Nam Á Bank — Software Engineering - Data Science | Intern December 2024 - March 2025

- \* Engineered full-stack applications (Vert.x, Java Android) and integrated Al/ML models (CV, OCR, LLM, Chatbot) to advance fintech digitalization, improving operational efficiency and user experience.
- \* Proposed and designed strategic enhancements for market expansion and customer onboarding, including an Al-driven passport OCR solution (leveraging synthetic data) and the expansion of remittance services to overseas Vietnamese in Australia.