Tran Minh Duong

AI Engineer Intern

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About Me

I build and deploy production-ready ML systems with an eye for reliability and scalability. I have experience in designing and operating RAG (Retrieval-Augmented Generation) chatbot and document-based retrieval pipelines.

Looking for AI Engineering / MLOps roles where I can ship and improve model delivery.

Education

BSc **La Rochelle University**, Computer Science — La Rochelle, France — Sept 2025 – present
- Student in exchange program

BSc **University of Science and Technology of Hanoi**, Information and Communication Technology (Double Degree) — Hanoi, Vietnam — Sept 2023 – July 2025
- Ranked 1st among Double Degree students
- GPA: 18.46/20 in Year 1; 18.50/20 in Year 2

Experience

ICTLab - USTH, Research Assistant — Hanoi, Vietnam — Mar 2025 – July 2025
Contributed to research on **context-aware fire detection** using Visual Language Models
- Published the fire context awareness dataset ↗ to benchmark multimodal VLMs
- Evaluated Qwen2.5VL, InternVL3 and Gemma3 by implementing pipelines to compare accuracy, precision, recall, F1-score and inference latency
- Fine-tuned VLMs using **PEFT/LoRA** to boost model accuracy up to 85% - 90%

Projects

Legal Contract Analyzer ↗ — July 2025 – Aug 2025
RAG Chatbot for understanding and extracting key information from legal documents
- Complete MLOps project with CI/CD and Monitoring
- Uses RAG with semantic search, embeddings + LLMs to retrieve relevant sections
- **Techstack**: Github Actions, FastAPI, vLLM, ChromaDB, Docker, Prometheus/Grafana

Fire Detection System ↗ — Mar 2025 – Apr 2025
IoT-based real-time fire detection and alerting system
- YOLOv8 trained on 1k+ annotated flame/smoke images (0.85 mAP0.5 and Precision = 0.95)
- Integrated Dockerized inference with Telegram alerts for live notifications
- **Techstack**: Roboflow, Ultralytics YOLOv8, Docker, OpenCV

Skills

Programming Languages: Python (proficient), Java, C++, Matlab, Bash

ML / DL: PyTorch, Hugging Face transformers, scikit-learn, numpy, matplotlib

Tools / MLOps: Git, Docker, CI/CD, FastAPI, Prometheus, Grafana

Languages: English C1 (IELTS 7.5), French B2 (DELF B2)