

CONTACT

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Portfolio: Website: <https://jimmynguyen09.vercel.app/>

GitHub: <https://github.com/JimmyNguyen09-AI>

EDUCATION

Bachelor of Information Technology | Oct 2023 – July 2026 (Expected)

King’s Own Institue (KOI), Sydney

- GPA: 3.8
- Major in Artificial Intelligence

Bachelor of Automotive Technology | Aug 2022 – Aug 2023

Ha Noi University of Science and Technology(HUST), Ha Noi

- Major in Automotive Technology

ACHIEVEMENTS AND HONORS

University Scholarship

- For excellent completion of academic semester: Semester 1, 2 and 3

Direct admission to university

- Directly admitted to Hanoi University of Science and Technology (HUST) due to academic excellence

3rd place award in Mathematics

- Mathematics in the Provincial Excellent Student Competition. Level of recognition: City

SKILLS & BACKGROUND KNOWLEDGE

- AI/ML:** PyTorch, OpenCV, Scikit-learn, LangChain.
- GenAI & LLM Ops:** OpenAI API, RAG pipelines, Mistral, Pgvector.
- Full-Stack ML Apps:** FastAPI, Node.js, Express.js, Next.js, React, Tailwind.
- Programming:** Python (strong), TypeScript/JavaScript, Java, C++, SQL.
- Dev Tools:** Docker, Git, Linux.
- Database:** PostgreSQL.
- Language:** English( IELTS 6.5 equivalent level ), VietNameese

EXPERIENCE

Personal Project

ZORA – AI Chat Platform

Designed and deployed a scalable AI chat system using a microservices architecture. Integrated RAG for context-aware responses and real-time message streaming with secure user authentication.

Skills & Tech: FastAPI · LangChain · Mistral 7B · Node.js · Next.js · JWT · Docker · Tailwind CSS

Link: <https://www.jnzora.com>

Quick, Draw! – Finger Drawing Recognition

Recreated Google’s Quick, Draw! game using real-time finger tracking via webcam instead of mouse input. Implemented gesture recognition and digit classification using OpenCV and a custom CNN model.

Skills & Tech: Python · OpenCV · Computer Vision · CNN · Real-time Inference

Link: <https://github.com/JimmyNguyen09-AI/QuickDrawGoogle-CNN>

Retrieval-Augmented AI Assistant

Built an intelligent assistant capable of answering questions from uploaded documents using Retrieval-Augmented Generation (RAG) and large language models. Designed for accuracy, scalability, and modularity.

Skills & Tech: LangChain · OpenAI API · FastAPI · RAG pipeline · ChromaDB

Link: <https://github.com/JimmyNguyen09-AI/AI-Assistant-RAG-LangChain->

### DCGAN – Face Image Generation

Implemented a Deep Convolutional GAN to synthesize realistic human faces from noise vectors. Focused on training stability, visual quality, and generator–discriminator balance.

**Skills & Tech:** PyTorch · DCGAN · Deep Learning · Generative Models

**Link:** <https://github.com/JimmyNguyen09-AI/DCGANs-FaceGenerate>

### Photomosaic Generator

Created a tool to generate mosaic-style images and videos by matching tiles based on color similarity using image processing techniques and distance metrics.

**Skills & Tech:** Python · OpenCV · Image Processing · NumPy · Euclidean Distance

**Link:** <https://github.com/JimmyNguyen09-AI/Photomosaic-Generator>

### Faster R-CNN – Object Detection

Applied a pretrained Faster R-CNN model to detect and classify objects in images using the Pascal VOC dataset. Focused on evaluation, bounding box visualization, and dataset integration.

**Skills & Tech:** PyTorch · Faster R-CNN · Object Detection · Pascal VOC · Computer Vision

**Link:** <https://github.com/JimmyNguyen09-AI/FasterRCNN-VOC>

### Staff-Tracking YOLO – Multi-Object Tracking

Applied a pretrained YOLO model (via Ultralytics YOLOv5) to detect and track staff in video streams. Focused on real-time staff detection, automatically marking seats as “empty” when staff leave, and logging the duration of absence, along with bounding box visualization and easy deployment from video input to tracked output.

**Skills & Tech:** Python · OpenCV · YOLO (Ultralytics) · Object Detection

**Link:** <https://github.com/JimmyNguyen09-AI/Staff-Tracking>

### Vision Q&A – Visual Question Answering

Developed a system combining YOLO-based object detection and HuggingFace LLMs to answer questions about images. Focused on visual analysis, natural language understanding, and Dockerized deployment.

**Skills & Tech:** Python · YOLO · PyTorch · HuggingFace · Streamlit · Docker · Vision-Language Models

**Link:** <https://github.com/JimmyNguyen09-AI/VisionQA>

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## INTERESTS

- Play sports (badminton, swimming)
- Cooking
- Coding