### **EDUCATION**

### Hanoi University of Science and Technology

Hanoi, Vietnam

Bachelor of Science in Data Science and Artificial Intelligence

Oct. 2020 - Sep. 2024

o Thesis: Efficient Class Incremental Learning for Object Detection

#### EXPERIENCE

# Homebrew Research

Singapore, Singapore Nov. 2024 - Present

LLM Researcher

• IchigoWhisper: Trained Ichigo Quantizer to support multiple Asian languages, achieving SOTA results and outperforming PhoWhisper and Whisper in low-resource languages.

### Viettel Group

Hanoi, Vietnam

Digital Talent

Apr. 2024 - Nov. 2024

• Conversational AI: Developed a real-time, end-to-end "zero-touch" universal AI assistant with a multi-agent system, multimodal capabilities, intent understanding, and personalized responses, creating Vietnam's first multimodal CRS, ranked Top 1 in the DSAI track of Viettel Digital Talent 2024.

# Google Developer Groups

Hanoi, Vietnam

Organizer

Sep. 2022 - Aug. 2024

• Leadership: Planned and created project blueprints, delegated tasks to individuals, connected teams, and provided future operational guidance, certified by Google's Global Headquarters.

### VinBrain (NVIDIA)

Hanoi, Vietnam

Applied Scientist

Sep. 2023 - Dec. 2023

o Medical Image Segmentation: Developed MedNeXt for rectal cancer diagnosis and treatment support.

#### Viettel High Tech

Hanoi, Vietnam

Computer Vision Researcher

Mar. 2023 - Aug. 2023

• Video Compression: Researched INRs for videos, resolved temporal information problem in previous NeRV-based methods, achieved SOTA results for video reconstruction and compression tasks.

## LEAN Platform

Southeast Asia

Machine Learning Researcher

Aug. 2022 - Jan. 2023

• Action Detection: Developed real-time Conv3D model for concentration recognition in online self-learning platform with 10000 users.

## Projects

- Detect Cheating in Examination: Researched and deployed real-time cheating detection solution using Pose3D and VideoMAE for 100-person exam rooms; featured on VTV24, DanTri, HUST,...
- **Bong**: Developed a real-time web application showcased at Google I/O Extended, featuring speech-to-speech, multimodal integration for Vietnamese, and RAG for live updates.
- Google I/O Extended Website: Designed front-end client and back-end admin websites, deployed hosting, and tracked event emails.

#### SKILLS

- Programming Language: Python, SQL, Java, C++, CUDA, TypeScripts, Javascripts, Triton.
- MLOps: GitHub, WandB, Docker, Kubernetes, MLflow, Airflow, Langchain, LangGraph, Weaviate, FastAPI.
- Framework: PyTorch, TensorFlow, Hugging Face, ONXX.
- Language: English (C1), Vietnamese.

### VOLUNTEERING

- Google Developer Groups Hanoi: Speaker presents "Detecting Cheating in Examinations" at DevFest 2022.
- SheCodes Vietnam: AI Mentor of SheCodes Hackathon Hanoi 2023.
- Nestlé: Ambassador of MT SparkTheNext Leaders Program 2023 & 2024.
- AIESEC: Representative of Mini Leadership Conference 2022.
- VinAI Research: Technical Collaborator at AI Day 2022.