Le Duc Anh Tuan

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EDUCATION

Hanoi University of Science and Technology   Hanoi, Vietnam
Bachelor of Science in Data Science and Artificial Intelligence   *Oct. 2020 - Sep. 2024*
- **Thesis**: Efficient Class Incremental Learning for Object Detection

EXPERIENCE

Homebrew Research   Singapore, Singapore
LLM Researcher   *Nov. 2024 - Mar. 2025*
- **Ichigo-ASR**: Trained Speech Tokenizer to support multiple Asian languages, achieving SOTA results on viVoice and LibriTTS-R.
- **Speechless**: Developed Speech Instruction Training Without Speech for 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*
- **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.

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.