# 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 - Aug. 2024

• Thesis: Efficient Class Incremental Learning for Object Detection

# Publications

- 3DNeRV (Passed Phase 1, AAAI 2024): A Cube-wise Neural Representation for Videos
- Speechless (Under Review, Interspeech 2025): Speech Instruction Training Without Speech for Low Resource Languages
- Poseless: Depth-Free Vision-to-Joint Control via Direct Image Mapping with Vision Language Model

### EXPERIENCE

## Menlo Research (Homebrew)

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
- Ichigo Ecosystem: Developed developer-focused speech package, provides easy access to advanced speech models via API, simplifying audio processing for faster deployment

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 multimodal multi-agent system, multimodal capabilities, personalized responses and creating Vietnam's first multimodal CRS

## 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

## **Data Science Laboratory**

Hanoi, Vietnam

Research Assistant

Oct. 2021 - Sep. 2023

o Continual Learning: Researched class-specific prompt rehearsal-free in continual object detection

#### 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, etc.
- Gemini Omni: Developed a real-time web application showcased at Google I/O Extended Hanoi 2024, featuring speech-to-speech, multimodal integration for Vietnamese, and RAG for live updates
- Google I/O Extended Website: Designed front-end UI client and backend admin websites and deployed hosting

#### SKILLS

- Areas of Interest: Multimodal/Reasoning LLMs, Multi-agent Systems, LLMOps
- 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, Vietnamese

## CERTIFICATES

## • Vietnamese Standardized Test of English Proficiency

2024-2026

∘ Level: B2

## ACHIEVEMENTS

- Top 1, Viettel Digital Talent 2024 (Data Science & Artificial Intelligence)
- Third Prize, Excellent Students Contest in Math 2019 (Provincial Merit Competition)
- Winner, Innovation Lab Asia CrowdPitch
- Best Incubatee, TechYouth (VinUniversity)
- CCMG Grantee, Cyberport (2nd largest incubator in Hongkong with 5 unicorns)
- Top 1, X-Challenge by VCCorp
- Top 1, Prometheus in digital transformation by European Union (out of 4000 teams)
- Top 1, Business Challenge 6 by Vietnam National University
- Top 5, Youth Impact Entrepreneurs by PNJ (VN30 Index)
- Top 6, Hult Prize Asia Summit 2022 (out of 1000 teams)
- Top 20, University Startup World Cup (out of 5000 teams)
- Top 30, Moonshot Global (out of 3000 teams)
- Top 100, XPITCH global (out of 4000 teams)

#### 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