

Truong Duc Tai
AI/Algorithm Engineer

♥ Ward 15, Go Vap, Ho Chi Minh City | ☎ 0327341107 | ✉ taitruong256@gmail.com | 🌐 linkedin.com/in/taitruong256

Education

Industrial University of Ho Chi Minh City, Vietnam	09/2021 – Present
Bachelor's Degree in Data Science	GPA: 3.48/4.0
	TOEIC: 715

Projects

Fine-tuning Vision-Language Model (VLM)	01/2025 – 05/2025
NLP Final Project, Scored 8/10	[Kaggle]
<ul style="list-style-type: none">Fine-tuned Vintern-1B-v2 on Viet-chart-VQA dataset using LoRA with PyTorch, peft, and datasets; processed 110k chart images and text queries.Preprocessed image-text pairs with PIL, tokenized text, and optimized training with DeepSpeed; achieved 0.91 BERTScore F1 on test set, improving baseline by 5.8%.	
Ensemble LLM Code Solver	03/2025 – 04/2025
Kaggle Competition, Ranked 21/149	[Github]
<ul style="list-style-type: none">Standardized prompts, queried DeepSeek-V3, Gemini 2.0 Flash, GPT-4o, Llama 3 via API, validated outputs (A, B, C, D), used majority/confidence-weighted voting.Achieved DeepSeek-V3 75%, Gemini 2.0 Flash 72%, GPT-4o 70%, Llama 3 62%, ensemble 71%.	
Mammography Breast Cancer Detection	01/2025 – 03/2025
Kaggle Project	[Github]
<ul style="list-style-type: none">Converted DICOM to PNG, filtered view/laterality, augmented data (flips, rotations, brightness), fine-tuned EfficientNet-B0, Resnet50, HR-Net, Swin-Transformer.	
Open Set Recognition	03/2024 – 09/2024
Young Scientists Conference 2024	[Kaggle]
<ul style="list-style-type: none">Utilized beta-VAE with Wide ResNet for latent space encoding; applied Extreme Value Theory for open set detection via probability thresholds.Achieved 99.7% closed set accuracy, 94.0% open set accuracy.	

Skills

Machine Learning/AI Frameworks: TensorFlow, PyTorch, Transformers, Keras, Scikit-learn, OpenCV
Data Science: Pandas, NumPy, Matplotlib, Seaborn, Plotly
Version Control: Git, GitHub
Databases: MySQL, MongoDB, SparkSQL
APIs & Web Services: Django Rest Framework, FastAPI
Crawl Data: Selenium, BeautifulSoup, Requests
Laboratories: Programming Lab, Data Innovation Lab

Awards

LOTTE Scholarship	2024
Academic excellence award by LOTTE Foundation.	Scholarship
Top 500 – Meta Hacker Cup	2024
Ranked among top 22492 participants.	Certificate
Top 12 Vietnam – ICPC Asia Hanoi Regional Contest	2024
Ranked among top 124 teams in Vietnam.	Certificate
Third Prize – ICPC Southern Vietnam Regional Contest	2023
Secured third place in regional programming contest.	Certificate
Second Prize – Vietnam National Collegiate Programming Contest	2022
National Round – Specialized Track.	Certificate
Consolation Prize – Vietnam National Collegiate Programming Contest	2021
National Round – Non-specialized Track.	Certificate
Top 5% – Scholarship for Encouraging Study	2 semesters
Awarded for outstanding academic performance.	