Minh-Nam Tran

 \square +84 382 563 952 | $\textcircled{\textbf{0}}$ trminhnam20082002@gmail.com

in LinkedIn | ♠ GitHub | ♠ Portfolio | ★ Google Scholar

EDUCATION

The University of Science, VNU-HCM

B.Sc. in Computer Science; GPA: 3.98/4.00

Ho Chi Minh, Vietnam Sep 2020 – Nov 2024

Thesis: "Exploring and Improving Language Understanding Abilities of Vietnamese Language Models" supervised by Prof. Dien Dinh and Dr. Long HB Nguyen.

High School for The Gifted, VNUHCM

High School Diploma; GPA: 9.10/10.00

Ho Chi Minh, Vietnam Sep 2017 – Jun 2020

Publications

- 1 M.-N. Tran, P.-V. Nguyen, L. Nguyen, and D. Dinh, "Dual-level learning for vietnamese medical natural language inference," in *review to conference*.
- 2 M.-N. Tran, P.-V. Nguyen, L. Nguyen, and D. Dinh, "ViMedAQA: A Vietnamese medical abstractive question-answering dataset and findings of large language model," in *Proceedings of the 62nd Annual Meeting of the Association for Computational Linguistics (Volume 4: Student Research Workshop)*, X. Fu and E. Fleisig, Eds., Bangkok, Thailand: Association for Computational Linguistics, Aug. 2024, pp. 356–364. \$URL: https://aclanthology.org/2024.acl-srw.31.
- 3 M.-N. Tran, P.-V. Nguyen, L. Nguyen, and D. Dinh, "ViGLUE: A Vietnamese general language understanding benchmark and analysis of Vietnamese language models," in *Findings of the Association for Computational Linguistics: NAACL 2024*, K. Duh, H. Gomez, and S. Bethard, Eds., Mexico City, Mexico: Association for Computational Linguistics, Jun. 2024, pp. 4174–4189. DOI: 10.18653/v1/2024.findings-naacl.261.
- 4 T.-A. To, M.-N. Tran, T.-B. Ho, et al., "Multi-perspective traffic video description model with fine-grained refinement approach," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) Workshops*, Jun. 2024, pp. 7075–7084.

Experience

Users and Information Lab, KAIST

Visiting Research Student

Daejeon, South Korea Jun 2023 – Aug 2023

- Engaged in a 2-month KAIST School of Computing Summer Internship program under the supervision of Professor Alice Oh and Ph.D candidate Rifki A. Putri.
- Investigated in adapting the multilingual gen erative pre-trained language models to Vietnamese downstream tasks via multitask instruction learning.

Viettel Digital Talent 2023, Viettel Headquarters

Hanoi, Vietnam

AI Engineer Internship

Apr 2023 - Oct 2023, Full-time

- Supervised by Dr. Nguyen Van Nam to complete a 6-month internship with two projects: solving table-to-text challenge and tackling text-to-SQL problem using LLMs.
- Ranked in the top 5 of the DS/AI group during the second stage of the internship.

Computational Linguistics Center, HCMUS-VNUHCM

Ho Chi Minh, Vietnam

- Worked as a research assistant, assisting with data analysis and data management for text-to-code problems and large language model applications.
- Collaborated with a team of researchers, compiled research findings for the team and contributed to project reports and presentations about large language models.

AI VIET NAM

Ho Chi Minh, Vietnam

AI Research and Development Intern

Sep 2022 - Jun 2023

- Led a team of six members in a code summarization project for developing a simple but highly interactive Streamlit application to generate docs from Python code.
- Worked in the Daily Math Team to create math exercises for ML/DL and translated TensorFlow-based project into PyTorch code to support the learning community.

AWARDS & ACHIEVEMENTS

Several Scholarships at The University of Science: Half-fee scholarship 2020-2021, Top 5% students in Advanced Program in Computer Science 2022, Semester Support Scholarship for top 10% APCS students, Full-fee scholarship 2021-2022.

2nd price in the 4th AI Challenge Ho Chi Minh City 2023: Worked in conjunction with a team named "Again," consisting of four members and implemented an image-text matching pipeline for the efficient retrieval of images from a vast database of 2 million photos using text descriptions.

Projects

Image Segmentation – Computer Vision Personal project | OGitHub

- Developed an object segmentation model by reimplementing the U-Net architecture in Python and PyTorch to segment pet images in the Oxford-IIIT Pet Dataset.
- Performed data pre-processing, including image resizing, normalization, and augmentation, to prepare the dataset for model training.

Machine Translation Application – Deep Learning Web Application | OGitHub

- Fine-tuned mBART50 deep learning model for Eng-Vi translation on IWSLT'15 English-Vietnamese data.
- Connected the NodeJS front-end webpage to the Python back-end server using the Flask framework, enabling seamless communication between the client and server.

Android Object Detection – Deep Learning Android Application | O GitHub

- Developed an Android application using Android Studio to perform real-time object detection using the device's camera.
- Optimized the EfficientDet model in terms of inference speed and battery consumption by using quantization techniques with TensorFlow Lite.

SKILLS AND TECHNOLOGIES

Languages: Python, C/C++, Java, R, Shell, JavaScript.

Technologies: Git/Gitlab, Machine Learning, Deep Learning, Docker, Docker Compose.

Frameworks: NumPy, Pandas, PyTorch, HuggingFace, TensorFlow, Scikit-learn, FastAPI, llama.cpp, LangChain, OpenCV, YOLO.

CERTIFICATES

TensorFlow Developer Certificate

Jul 2023

Developing CV, NLP models with TensorFlow

Deep Learning

Jun 2022