

Do Thi Minh Trang

DATA SCIENTIST INTERN · MACHINE LEARNING INTERN · DEEP LEARNING INTERN

☎ (+65) 81437233 | ✉ DO0009NG@e.ntu.edu.sg | 🌐 www.posquit0.com | 📱 Trangdo2104 | 🔗 www.linkedin.com/in/trangdo2104

Education

Nanyang Technological University

Singapore

B.S. CHEMICAL AND BIOMOLECULAR ENGINEERING WITH MINOR IN COMPUTING AND DATA ANALYSIS

Aug. 2022 - May. 2026

- **Awards:** ASEAN Scholarship for Undergraduate
- **GPA:** 4.53, CGPA: 4.23
- **Relevant Modules:** (1) Intro to Computational Thinking to Programming; (2) Intro to Data Science and AI; (3) Engineering Statistics; (4) Decision Tools for Engineering Business; (5) Engineering Mathematics
- **Virtual Training and Development:** (1) Machine Learning Specialization (2) Deep Learning Specialization (3) Mathematics for Machine Learning (4) IBM Data Science (5) IBM Data Analyst (6) The Data Science Course 2023: Complete Data Science Booth Camp

Skills

Programming Python, HTML, MATLAB, VBA, LaTeX

Frameworks TensorFlow, PyTorch, FastAI, Keras, Scikit-Learn, OpenCV, Matplotlib, Seaborn Pandas, NumPy, PowerBI, Tableau, Gradio, Streamlit

Others Git, Github, AWS

Experience

Undergraduate Research, Nanyang Technological University - National Institute of Education

Singapore

URECA PROJECT - ANALYSING CLASSROOM AUDIO-VISUAL DATA USING ARTIFICIAL INTELLIGENCE/MACHINE

Aug. 2023 - June. 2024

LEARNING

- Engineered a highly accurate (95%) Singlish speech recognition system using PyTorch, incorporating extensive data preprocessing and custom annotation.
- Advanced sentiment analysis in an educational context by customizing a transformer-based NLP model, specifically targeting educational sentiment expressions.
- Implemented noise remover and audio normalization techniques to enhance the quality of sparse Singlish audio datasets for efficient machine learning model training.

Personal Projects

Face Recognition and FaceID Application Developer

GITHUB

- Developed a robust preprocessing pipeline featuring targeted image resizing and augmentation, effectively countering overfitting and boosting model accuracy.
- Designed and implemented a custom MobileNet architecture in TensorFlow, incorporating L1 Distance layers to enable advanced one-shot face verification.
- Fine-tuned a Siamese neural network to achieve 99% precision and recall within five epochs, significantly surpassing baseline models and improving computational efficiency by 60%.
- Crafted an intuitive user interface using the Kivy framework for a high-performance face recognition application, enabling seamless FaceID functionality.

Custom Implementation and Fine-tuning of Stable Diffusion with LoRA

HUGGING FACE

- Developed a custom version of the Stable Diffusion model from the ground up, focusing on a detailed understanding of its transformer and autoencoder architectures.
- Applied Low-Rank Adaptation (LoRA) for fine-tuning the model, successfully adapted the model to replicate the distinctive artistic style of "Waltz with Bashir".
- Successfully deployed the modified model on Hugging Face, utilizing Gradio for an interactive and user-friendly interface.

Leadership

NTU Vietnamese Freshmen Orientation Camp

Singapore

CHAIRPERSON

Jul. 2022 - Aug. 2023

- Led a diverse team of 40, comprising 8 main and 32 sub-committees, to successfully organize fundraising events and secure fund from sponsors.
- Co-founded student-based support group for potential students organized 100+ seminars
- Fostered partnerships with educational centers, providing support to over 40 Vietnamese freshmen at NTU.
- Orchestrated a successful Freshmen Orientation Camp, engaging 130 campers, including freshmen, seniors, and alumni, on 12th and 13th August 2023.