# Sy-The Ho

#### **EDUCATION**

#### Hanoi University of Science and Technology

Hanoi, Vietnam Sep 2020 - Jul 2024

School of Information and Communication Technology

- Bachelor of Computer Science
- CPA: 3.78/4.0

#### WORK EXPERIENCE

# Al Engineer (MISA JSC)

Hanoi, Vietnam Jul 2024 - Now

- Maintaining and improving performance of Al chatbot, especially the Knowledge Retrieval module.
- Research on Knowledge Retrieval Module of RAG chatbot systems.
- Research on Text Embedding model for multi-domain adaptation.
- Train LLM chat model for chatbots.
- Deploy Text Embedding and LLM models on GPU clusters, providing APIs for other applications.

#### Al Fresher (MISA JSC)

Hanoi, Vietnam Apr 2024 - Jul 2024

- Study about RAG chatbots.
- Research on Text Embedding models.
- Develop a basic RAG chatbot.

#### PROJECTS

#### **Estate Price Prediction using Description (Github)**

Sep 2023 - Dec 2023

- Developing an application that helps people make predictions about the prices of various types of real estate based on it's description in the capital city of Hanoi, Vietnam.
- Task: Crawling data from websites, Preprocessing collected data, Performing EDA and data analysis, Applying deep learning model and Serving on Microsoft Azure.

#### **Translation** (Github)

Feb 2023 - Feb 2024

- Baseline: Developing a translation model using LSTM and Attention mechanism to transate from English to Vietnamese.
- Research improvement: Research on using Transformer model with positional encoding applied at each hidden layer.
- **Dataset:** PhoMT. Training data and evaluation data include original data and original data with source and target sentences reversed, to serve the purpose of two-way translation.

#### Image Captioning (Github)

Apr 2022 - Jul 2022

- Developing a Image2Text model that combine pretrained ResNet101v2 model and the Transformer Decoder model to generate text describing of the image.
- Dataset: Flickr8k.

#### **SKILLS**

- Languages: Python, Rust, C/C++, Java, Kotlin, JavaScript, SQL.
- Specialized Skills: Natural Language Processing (NLP), Computer Vision (CV), Machine Learning, Deep Learning, Data Science, Big Data
- Libraries and Tools: Pytorch, Tensorflow, Numpy, Pandas, Git, Docker, Kubernetes, Linux
- Soft Skills: Presentation, Planning, Problem-Solving, Teamwork, Active Listening

### **LANGUAGES**

• English [Basic - able to read, understand and communicate in basic English]

# **HONOURS AND AWARDS**

Final round BKAI Air Quality Forecasting Challenge 2022 Top 10 Final Nestquant Tournament 2023 Oct 2022 Jul 2023

# **CERTIFICATIONS**

Top 10 Final Nestquant Tournament 2023 (Link) Big Data Foundations - Level 2 (Link)