

EDUCATION

Ha Noi University of Science and Technology

BSc in Data Science and Artificial Intelligence (DS-AI)

Ha Noi, Viet Nam

Aug. 2021 – Now

Phan Boi Chau Gifted High School

Specialization in Mathematic; GPA: 3.64 (9.1/10.0)

Nghe An, Viet Nam

Aug. 2018 – July. 2021

EXPERIENCE

Freelance

AI and Quantitative Researcher

Taiwan

Sep 2023 – Dec 2023

- **Reinforcement Learning Agent for Trading:** Developing an Agent with capable of navigating the volatility within the trading environment, surpass the performance of ensemble models.

VIS Laboratory

Part Time Machine Learning Researcher

Ha Noi, Viet Nam

May 2022 – Jul 2023

- **Agent for Multiplayer Game:** Research and Develop Reinforcement Learning algorithms based on current SOTA such as PPO, Transformer, successfully surpass 95% of the envs in the System.
- **Multiplayer Game Envs:** Developed 3 Gym's based multiplayer envs for the purpose of researching algorithms.
- **Japanese Stock Market:** Research about Japanese stock market, ensure the credibility of sources and gather data by utilizing web crawling techniques.

Ha Noi University of Science and Technology

Data Science Laboratory

Ha Noi, Viet Nam

Dec 2022 – Apr 2023

- **Machine Learning Research:** Learn and Research about fundamental challenges in Machine Learning.

TECHNICAL SKILLS

Languages: Python, Javascript, Java, C++

Framework: Pytorch, OpenCV, Huggingface, Scikit Learn, Polars, FastAPI, Flask

Developer Tools: Git, Github, Docker, Bash, Linux, Postman, AzureML, AWS

Research Topics: Transformer-Based Model, Large Language Model, Policy Gradient Model

PERSONAL PROJECTS

Vietnamese OCR: OCR model for Vietnamese's handwritten text using Transformer, achieve 4% CER (Character Error Rate) in the test dataset. **Tools:** Python, Pytorch, Lightning, OpenCV, Docker

Personal Website: My personal blog about AI, Machine Learning and landing page for personal information and resume. **Tools:** Javascript, HTML, CSS

PPO Transformer: A Reinforcement Learning project using PPO and Transformer for multiplayer game, successfully surpass other algorithms in the system. **Tools:** Python, Pytorch

Piano Generation: Generate classical piano in MIDI format using generative model such as Transformer, GPT2,... **Tools:** Python, Lightning, Huggingface

Laptop Price Prediction: An end to end data science project about laptop price prediction, crawling, analyzing and modelling to gain insight about current laptop market. **Tools:** MongoDB, Selenium, Polars, Seaborn, Scikit-Learn

Physic Simulation: An interactive simulation designed to demonstrate Newton's laws of motion, written in Java and JavaFX. **Tools:** Java, JavaFX, Scene-builder

LANGUAGES

Vietnamese: Native language.

English: Full professional proficiency.