

## EDUCATION

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**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

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**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

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**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

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**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

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**Vietnamese:** Native language.

**English:** Full professional proficiency.