

# PHAM THI HONG PHUNG

AI ENGINEER

## CONTACT ME



## PROGRAMMING LANGUAGES

- Programming: Python, R, C++, SQL
- ML/DL Frameworks: Scikitlearn, Transformers, Langchain, Huggingface
- Tools & Platforms used: FAISS (vector search), Neo4j (graph database), Git (version control)
- Concepts: LLM Fine-tuning, RAG, Autonomous Agent

#### PERSONAL PROFILE

Aspiring Al Engineer currently pursuing a Master's in Data Science, with a strong interest in intelligent autonomous agents and large language models. I aim to contribute to building scalable and context-aware Al agents that create real-world value. I'm seeking a position that challenges me to grow and allows me to apply my research and technical skills to production-level agent systems.

# **PROJECTS**

Autonomous Financial Agent using Large Language Models

- Developed an autonomous agent tailored for the financial domain, capable of engaging in multi-turn dialogue and answering complex financial queries.
- Designed and implemented a hybrid retrieval architecture that combines dense vector search (FAISS) and sparse keyword-based retrieval (BM25) to enhance both recall and precision over financial corpora.
- Integrated a cross-encoder reranker to refine retrieved document candidates from both retrieval pathways, significantly boosting downstream generation accuracy.
- Fine-tuned large language models using Supervised Fine-Tuning (SFT) and Direct Preference Optimization (DPO) to align model outputs with domain-specific response preferences.
- Evaluated the end-to-end system using industry-

measure retrieval relevance and generative quality.

- Fine-tuned LLMs efficiently with Unsloth and 4-bit bitsandbytes, deployed via vLLM for fast and scalable inference.
- Tech Stack: Python, Langchain, Hugging Face Transformers, FAISS

#### **EDUCATIONAL HISTORY**

UNIVERSITY OF SCIENCE - VNU HO CHI MINH CITY Master of Data Science | 2021 - Now

UNIVERSITY OF SCIENCE - VNU HO CHI MINH CITY Bachelor Degree of Mathematics | 2012 - 2016

## **WORK EXPERIENCE**

# Front-end Developer

Cybridge Asia Corporation | Nov 2017 - Apr 2021

- Developed the UI user interface pages using HTML, CSS, JavaScript, jQuery, and Ajax.
- Implemented responsive web design to be compatible in all devices.
- Developed client side Interface using Vue.js
- Expertise in using PHP to insert the queries and functions needed to build a working WordPress theme

## **Javascript Engineer**

Global Cybersoft | Jan 2017 - Oct 2017

- Developed client side Interface using HTML, CSS, Javascript.
- Maintenance web using HTML, CSS, Express.js, Mongodb