

NGUYEN VAN NGHIEM

AI Engineer

☎ 0399802905 ✉ nguyenvannghiem0312@gmail.com 🔗 <https://github.com/nguyenvannghiem0312> 📍 Hai Ba Trung, Ha Noi

OBJECTIVE

Pursuing a career in the field of Artificial Intelligence, I aspire to engage in a professional academic environment to absorb knowledge, gain experience, and contribute to the development and application of advanced AI technologies. My goal is to create intelligent and innovative solutions for societal and business challenges through the utilization of cutting-edge AI technologies.

EDUCATION

Hanoi University of Science and Technology 9/2020 - Now

Fourth-year student - Talented Program in Mathematics and Informatics
CPA: 3.62

ACTIVITIES

Teaching Assistant at the School of Information and Communications Technology - Hanoi University of Science and Technology. 10/2022 - 02/2023

Teaching Assistant
Teaching assistant for four classes with approximately 150 students.
Conducted attendance, provided guidance to students, and compiled and assessed exam scores.

EXPERIENCE AND PERSONAL PROJECTS

VA-FSchool. 7/2024 - Now

NLP Engineer Collaborator in FTECH.AI.
Participate in the FSchool project. Perform the assigned tasks.
Support data-related tasks, evaluation, and data construction for the Literature model.
Research to improve the Document Validate module to reduce irrelevant documents in retrieval for the History model.

Semantic Textual Similarity 1/2024 - 6/2024

NLP Engineer Internship in FTECH.AI.
Research and experiment with Text embedding methods for Historical, Geographical, and Literary domain data to integrate into the retrieval system for answering user questions on the website FQA.vn.
Improving performance by 5-7% compared to the current models, testing, verifying, and integrating into the product version.

Building a Vietnamese Legal Question-Answer System 3/2024 - 7/2024

Bachelor's Graduation Project
Constructed based on the basic RAG architecture.
Collect and build a database comprising 360,000 legal provisions.
Improve the retrieval model, increasing performance by ~20% compared to open-source models.
Fine-tune the LLM 8B parameters model for the legal domain.
Utilize technologies such as ChromaDB and vLLM to build the system on only an RTX 3090 - 24GB. Average ~ 10s/request.

Build a question-answering chatbot for information about the School of Applied Mathematics and Informatics - SAMI.

9/2023 - 1/2024

https://github.com/nguyenvanngkiem0312/SAMI_Q-A
Collect data on SAMI and construct training and testing datasets.
Fine-tune the Bi-Encoder model, combined with BM25 to improve query results on the SAMI data domain.
Experiment with Vietnamese LLMs like VinaLLaMa, and SeaLLMs to answer questions.

Hackathon CHAT’INNOV: Build a chatbot for computer/laptop product consultation.

12/2023 - 12/2023

Member
Develop a chatbot using GPT-3.5 API combined with the RAG technique to advise customers from two stores, Anphatpc and Thegioididong.
Building a pipeline for the system, design prompts to determine customer intent. Extract user information and query for suitable products with prompts to provide reasonable answers.
Top 8 teams in the final competition.

AI CHALLENGE: Developing a Chatbot to Answer SAT-Level Math Questions.

11/2023 - 11/2023

https://github.com/nguyenvanngkiem0312/AI_CHALLENGE
Achieved success in fine-tuning a smaller-scale model (Flan-T5 283M parameters) that outperformed the GPT 3.5 API, particularly excelling in multiple-choice math problem-solving.
Achieving the Championship in the final round.

Building a recommendation system for the recruitment field.

7/2023 - 7/2023

https://github.com/nguyenvanngkiem0312/Recommendation_system_for_recruitment
Leadership role as the head of a 3-member academic project team.
Developed a recommendation system suggesting the Top K Resumes corresponding to the input Job Description (JD).
Achieved an impressive nDCG@5 score of approximately 89%.

CERTIFICATIONS & AWARDS

Scholarship Encouraging Study of HUST	2024
First place winner of the AI CHALLENGE: CHATGPT PROBLEM SOLVERS competition.	2023
Scholarship Encouraging Study of HUST	2023
SEKISHO-sponsored Japanese Language Scholarship.	2023

SKILLS

Programming Language:	Python, C/C++, C#.
Foundational Knowledge	Mathematics, Object-Oriented Programming (OOP), Machine Learning, Deep Learning, Large Language Model (LLMs), Database.
Professional Skills	Tensorflow, PyTorch, Git/GitHub, SQL server, Docker, VectorDB, LLM frameworks.
Language	Reading Comprehension in English (780 Toeic).