

Hieu Nguyen

Hanoi, Vietnam • hieunv.dev@gmail.com • (+84) 372615855 • [linkedin.com/in/behitek](https://www.linkedin.com/in/behitek)
github.com/behitek • behitek.com

WORK EXPERIENCE

AI Engineer

Feb 2023 - Present

VMO Holdings

Hanoi, Vietnam • On-site

- Working as a key member on several AI projects (Recommendation, RAG-related platform), from problem research, architecture design, technique proposes, coding, code review, and deployment support, ...
- Directly working with customers in English communication.
- Enhanced the accuracy of the retrieval pipeline in the RAG system by 30% compared to the baseline version.
- Support project members and team members in technique problems.

AI Engineer

Jan 2021 - Jun 2022

Zalo, VNG

Hanoi, Vietnam • On-site

- Develop text normalization modules for speech synthesis and speech recognition using a hybrid method: rule-based, language modeling, and deep learning (seq2seq) model.
- Developed and optimized services deployed on K8S environments, resulting in a 15% reduction in error rates.

Data Scientist

Mar 2019 - Jan 2021

Zalo, VNG

Hanoi, Vietnam • On-site

- Developed and applied speech products (ASR, TTS) to the Zalo ecosystem and KiKi virtual assistant, collaborating with a team of ten members.
- Optimized the language model to increase ASR's performance by up to 12% on products using ASR in the Zalo ecosystem (KiKi, LabanKey, ZingMP3, Zalo).
- Collect, analyze, and clean data from various sources to support team tasks, leading to an increase in model accuracy for training AI tasks.

NLP Developer

Jan 2018 - Mar 2019

VCCORP

Hanoi, Vietnam • On-site

First full-time job when a 4-year student, lovely working in re

- Develop a semi-AI system to prevent spam comments on e-newspapers using Word2Vec (word similarity) and classification models.
- Deployed AI service to the server using RestAPI, support integration to the CMS system.
- Experiment with using Apache Hadoop and Spark for data storage and computing.

SKILLS

Domain Knowledge: Large Language Model (LLM), Retrieval-Augmented Generation (RAG), Natural Language Processing (NLP), Information Retrieval, Data Crawling, Data Mining, Back-end Operations, System Design

Programming Languages: Python, Java, C/C++, Bash, HTML/CSS/JS

Tools & Frameworks: Git, Docker, MySQL, Kafka, Redis, Postgres (PGVector), Milvus, Pandas, Scikit-learn, Transformers, FastAPI

PROJECTS

Luyện Code (LCOJ)

Jan 2018 - Present

An online coding challenge platform (Similar Codeforces) that serves over 10.000 Vietnamese students and provides AI-related IT services.

Tech stacks: Python, PHP, HTML/CSS/JS, WordPress, Docker, Self-hosting, Blogging

Simple RAG

Apr 2024 - Apr 2024

Simple Retrieval-Augmented Generation pipeline using PDF extraction (poppler), Retrieval (BM25), Reranking (cross-encoder), and self-hosted LLM (Ollama) with well-code structure.

EDUCATION

Master's degree, Information Science

Oct 2020 - Dec 2022

Japan Advanced Institute of Science and Technology

Studying abroad for a master's degree on a scholarship

Engineer's degree. Computer Software Engineering

Jan 2014 - Dec 2019

Electric Power University

GPA: 3.3

Start the Internship as 2nd-year student, member of ACM/Olympic teams over three years

CERTIFICATIONS

Shopee Code League 2021 - Participant  by Shopee

May 2021

Vietnamese Standardized Test of English Proficiency (VSTEP) - B2  by Hanoi University

Apr 2021

LANGUAGES

PUBLICATIONS

Miko Team: Deep Learning Approach for Legal Question Answering in ALQAC 2022 ↗ on International Conference on Knowledge and Systems Engineering (KSE)	Sep 2023
Technical report for 1st rank in Task 01 (Document Retrieval) at ALQAC 2023	
Development of Zalo Vietnamese Conversational Speech Recognition for VLSP 2019 ↗ on VLSP	Nov 2019
Technical report for Second prize, Speech-to-Text Shared Task VLSP 2019	

AWARDS

First prize, Automated Legal Question Answering Competition by International Conference on Knowledge and Systems Engineering	Oct 2022
Second prize, Speech-to-Text Shared Task VLSP 2019 by VLSP	Oct 2019
Champion, AI4VN National Grand Finale Hackathon by Topica, Kambria & MOST	Aug 2019
Second Prize, ACM/ICPC VietNam National Programing Contest by Vietnam Association For Information Processing (VAIP)	Nov 2018