NGUYEN TRONG DANG-KHOA

Fresher AI Engineer

Ho Chi Minh city, Viet Nam | (+84) 938-928-064 | khoa15503.work@gmail.com | /in/ntd-khoa | Khoa15.github.io | github.com/Khoa15

CAREER OBJECTIVE

A highly motivated IT person with a solid foundation in **software development** and a strong interest in **Artificial intelligence**. Eager to contribute to a dynamic technological environment by applying problem-solving skills and a quick learning ability to build innovative, robust solutions, driving the development of impactful tech products.

EDUCATION

Ho Chi Minh City University of Industry and Trade

08/2021 - 04/2025

Bachelor of Information Technology | **GPA: 3.23/4**

- Research assistant.
- Participating in Euréka 2023.

SKILLS

Programming: Python, Java, Javascript, SQL, NoSQL

Frameworks & Library: React, Pytorch, Pandas, Numpy, Scikit-learn, FastAPI, HuggingFace, Langchain

Databases: MySQL, MongoDB, ChromaDB

Tools & Platforms: Docker, Git, Linux, Jupyter Notebook, Anaconda, Ollama

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Deep Learning: CNN, RNN, LSTM, Transformers, CLIP, Fine-tuning

Machine learning: logistic regression, KNN, decision trees, random forests, SVM

Others: Research skills, Learn fast, Growth mindset

Languages: Vietnamese (Native) | English: **TOEIC(LR) 720, IELTS 6.0**

My certifications: khoa15.github.io/certifications.html

EXPERIENCE

Backend Intern

09/2024 - 12/2024

EdunetJSC

- **Researching** technical documentation from the open-source Frigate codebase, implement the detection module on the application.
- **Studying** and adjusting configurations resulted in a **2% improvement** object detection accuracy in the production environment.
- **Researching** IoT documentation, assist in maintaining water quality monitoring stations which are IoT devices.

AWARDS AND HONORS

- Encouragement Award for "Emergent products and topics in the information technology field", HUIT. 7/2023
- First prize in "Young coder's Competition: Finding the Best and Brightest", HUIT. 6/2023
- Third prize in "Science Fair". 11/2020

PROJECTS

SIML RAG

github.com/Khoa15/simpl-RAG

- Developed multi-instance support, which improved system scalability and fault tolerance.
- Implemented in-memory processing to achieve fast and low-latency data handling.
- Integrated RAG with Gemini, providing accurate and contextually relevant AI responses.
- Designed an auto-delete feature for inactive users, optimizing resource use and enhancing data security.

python | fastapi | react | langchain

Sentiment Classification

github.com/Khoa15/deep-learning/blob/main/src/models/rnn.ipynb

- Built a basic RNN to classify sentiment (positive, neutral, negative) on financial news using Kaggle data.
- Preprocessed text (lowercase, punctuation removal, stopword elimination, stemming) and mapped words to indices.
- Assessed RNN's strengths in short-term sequence modeling and noted limitations with longer texts.

python | pandas | numpy | scikit-learn

Exci

github.com/Khoa15/exci.git

- A simple app utilized Ollama to support users learning english. Using spaced repetition for personalized learning, create your own vocabulary collections. Search and save vocabulary through API dictionary.
- Prompting Ollama models to enhance vocabulary learning experience. One for AI chatbot, one for vocabulary search and save. Enhancing the user experience with a Flutter application.
- Developed a backend using ASP .NET to manage user data, vocabulary collections. Using Ollama system to handle AI chatbot and vocabulary search. Statistics and report in winform .NET application for admin.

Flutter | ASP .NET | Winform .NET | Ollama | Python

Age Classification

Khoa15/huit-ai.git

- Responsible for developing and training Convolutional Neural Networks (CNNs) to classify images into 12 distinct classes using the UTKFace dataset.
- Build server python with Flask which is recieved request from client to classify age.
- Config client for request and receive response.

Python | React native | Tensorflow | Flask

Note-Taking

github.com/Khoa15/dury.git

- Developed a Spring Boot backend and REST API to manage notes, categories, and secure user authentication with full CRUD functionality.
- Integrated a Flask microservice for Optical Character Recognition (OCR), converting images to text using the Tesseract library.
- Designed and enhanced the Android application's UI to provide an intuitive experience for adding, updating, and deleting notes and categories.

Spring | Mongodb | Firebase | Android (Java) | Flask