# Nguyen Minh Duc

## Final-year student


0972219870

nguyenminhduc890@gmail.com

03/03/2003

482/15/39B Dien Bien Phu, Ward 11, District 10, TP Hồ Chí Minh

linkedin.com/in/minhduc030303/


I am a final-year Computer Science student at Vietnamese-German University, currently pursuing an exchange semester at Frankfurt University of Applied Sciences with a fully-granted DAAD scholarship. My passion for technology and problem-solving drives me to excel in machine learning, deep learning, and data analytics. With hands-on experience in building innovative solutions, I have developed projects ranging from sentiment analysis to fraud detection and object tracking. I thrive in both academic and practical environments, having won first-place awards at coding contests. My goal is to leverage my technical expertise and collaborative mindset to create impactful solutions in the fields of AI and software development.

## EDUCATION

### Vietnamese German University

**10/2021 - Now**

Computer Science

A final-year Student

### Frankfurt University of Applied Sciences

**09/2023 - 02/2024**

Computer Science

An exchange semester in Frankfurt, Germany with fully-granted DAAD scholarship.

## SKILL

### Excellent

| | |
|---|---|
| Deep learning | Data Analytics |
| GCP | SQL |
| Machine learning | JSON |
| ETL | TensorFlow |
| Computer Vision | PostgreSql |
| Python | PyTorch |
| Git | Data visualization |
| Spring | RESTful |
| ExpressJS | LLM |

### Intermediate

| | |
|---|---|
| Tableau | HTML |

## WORK EXPERIENCE

**07/2023 - 09/2023**

### Teaching Assistant | Teky

Support the teacher to teach secondary students about web development. Students can create a simple web using Python, HTML, CSS

## PERSONAL PROJECT

**09/2024 - 09/2024**

### NLP Challenge: IMDB Dataset of 50K Movie Reviews to perform Sentiment analysis

In this project, I developed a sentiment analysis model using LogReg,SVM,DecisionTree,RandomForest,XGBoost, and two powerful transformer-based architectures, BERT and RoBERTa. The primary objective was to classify text as either positive or negative in sentiment.

**08/2024 - 08/2024**

### Salifort Motors Workforce Analysis

The comparative analysis of the decision tree (DT), random forest (RF), and XGBoost models (XGB) underscores several key factors influencing employee turnover. While the decision tree offered foundational insights, the RF and XGB models unveiled a richer, more detailed landscape of turnover predictors. The nuanced differences between these models suggest that a multi-faceted approach to retention strategies might be necessary, considering not only the quantity but also the quality and complexity of workload and career development opportunities

**07/2024 - 08/2024**

### Fake Account Detection

Detect fake account using Logistic Regression, Random Forest, LSTM, etc.

**07/2024 - 08/2024**

### DeepLearning_Specialization

This project is created during the Deep Learning Specialization on Coursera.

## CERTIFICATE

### Google Advanced Data Analytics

**08/2024 - Coursera**
**View certificate**

I completed an advanced program focused on in-depth data analysis, statistical methods, and data visualization. I also gained proficiency in using tools like Google Cloud and BigQuery to perform complex data analyses and generate actionable insights.

### Deep Learning Specialization

**08/2024 - Coursera**
**View certificate**

I completed a comprehensive five-course program focused on neural networks, deep learning techniques, and model optimization. Furthermore, I gained expertise in Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), LSTM, and cutting-edge techniques for improving model performance and structuring AI projects.

## AWARD

### Frankfurt UAS Contest_Herbst Programming Day 2023 (11/2023)

**Frankfurt University of Applied Sciences**

- Won the 1st prize and became one of representatives for Frankfurt UAS joining The 2023 ICPC Northwestern Europe Regional Contest.

### Cloudflight Coding Contest (10/2023)

**Cloudflight company**

- Won the 1st prize with my team in the AI board.

### Fully-granted DAAD Scholarship

**05/2023**

**DAAD**

- I was selected among the Top 30 students in the CSE department of Vietnamese German University and received full sponsorship for an exchange semester in Frankfurt.

**07/2024 - 07/2024**

### Credit Card Fraud Detection

In this project, I aim to identify fraudulent transactions with credit cards. The objective is to build a fraud detection system using machine learning techniques. Historically, such systems were rule-based, but machine learning offers powerful new ways to detect Fraudulent Credit Card transactions and compare performances.
The project uses a dataset of 300,000 fully anonymized transactions. Each transaction is labeled either fraudulent or not fraudulent. Note that the prevalence of fraudulent transactions is very low in the dataset—less than 0.1% of the card transactions are fraudulent. This means that a system predicting each transaction to be normal can reach an accuracy of over 99.9% despite not detecting any fraudulent transaction. This will necessitate adjustment techniques. The best performance is achieved using the SMOTE technique.

**06/2024 - 07/2024**

### Object Detection with Yolov8

The Object Detection and Tracking Application integrates YOLOv8 with Streamlit, facilitating real-time detection and tracking of objects. Featuring a user-friendly interface, it accommodates tasks such as analyzing images and videos, processing webcam feeds, and handling YouTube videos. This versatile application streamlines the setup of detection tasks, delivering prompt and user-intuitive outcomes. Tailored for diverse scenarios, it presents a seamless approach to harnessing the robust capabilities of YOLOv8 for effective object detection and tracking.

**06/2024 - 07/2024**

### File_Based_Chatbot

Allow users to input many files, then the bot will answer any questions from user based on provided files.

**04/2024 - 06/2024**

### Library Management System

The online library management system project aims to streamline library operations, improve the user experience, and enhance access to library resources. It automates tasks such as book cataloging, tracking, and borrowing while offering user-friendly interfaces for staff and patrons. The system increases operational efficiency, improves accessibility, and provides a centralized platform for managing library resources.

**03/2023 - 05/2023**

### Object Tracking

Tracking objects, particularly my teacher face with any angles, implemented by C.