


# To Duc Anh

toducanh2001@gmail.com

My LinkedIn: To Duc Anh

 Hyprnix

</> Python, C/C++, Docker, R, SQL, HTML

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## INTRODUCTION

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I am a third-year Data Science student at National Economics University (NEU). With my childhood passion for numbers, economics, and programming, I believe that I am capable of finishing the assigned tasks at the finest level.

## EXPERIENCE

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### • DSLAB NEU

Member

Hanoi, Vietnam

November 2021 - Present

- DSLAB is a laboratory belonging to the Faculty of Mathematics Economics (MFE), National Economics University (NEU), specialized in the fields of Data Science and Artificial Intelligent (DS & AI)).

### • IBM's Qiskit Localization Team

Translator/Proofreader

(remote) Hanoi, Vietnam

March 2021 - Present

- Translate IBM's Qiskit documentation from English to Vietnamese for the community.

**Technologies:** Python, Qiskit, Crowdin.

**Theory:** Programming, Quantum Physics, Quantum Programming.

### • Vietsearch.org

Intern

Hanoi, Vietnam

August 2020 - Present

- Designed, implemented crawlers to crawl data from LinkedIn, Google, Wikipedia, etc. with BeautifulSoup and requests library in Python.
- Optimized existing crawlers, lower three times running time.
- Developed query data APIs to serve customer's demand based on Elasticsearch search engine.
- Designed unit and integration tests for APIs.

**Technologies:** Docker, Python, Swagger, Flask, BeautifulSoup, Selenium, Unittest, etc.

**Database:** Elasticsearch, MongoDB.

**Theory:** Crawling data, cleaning data, systematize data, Query, API, Testing.

## EDUCATION

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### • National Economics University

Major: Data Science in Economics and Business

Hanoi, Vietnam

September 2019 – May 2023

- GPA: 3.45/4.0
- The second semester honored student of the school year 2021
- Achieved A+ (10.0) in Data Structure and Algorithm course
- Achieved A+ grade in Machine Learning 1 course
- Achieved A+ grade in Data Preparation and Visualization course

### • Vietnam - Germany High school

Hanoi, Vietnam

September 2016 – May 2019

- GPA: 8.6/10
- Third Prize in Biology Contest (2017, 2018)
- Third Prize in Geographic Contest (2018)

## COURSES

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- **Data Structure and Algorithm (DSA)** NEU, Hanoi, Vietnam  
**OOP:** Understand about four concepts of OOP  
**Data Structures & Theories:** Understand Time Complexity, Space Complexity, Recursion, and the concepts and usages of basic data structures such as Array, Queue, Stack, Tree, Heap.  
**Sorting Algorithms:** Experienced using Binary Search, Insertion sort, Heap sort, Bubble sort. Basic understanding of Radix sort
- **Database Management System (DBMS)** NEU, Hanoi, Vietnam  
**Designing database:** Understand Business Rules to design tables and databases.  
**Query:** Experienced how to get data from one or multiple table using SELECT, JOIN.  
**View, Procedure and Trigger:** Know how to create a view to observe data instantly. Understand the usages of Procedure and Trigger, apply those usages in the final project.
- **Data Preparation and Visualization** NEU, Hanoi, Vietnam  
**Preparing data:** Experienced using Python libraries such as Numpy and Pandas to calculate, manipulate and clean data. Implemented other encodings to encode categorical data  
**Visualizing data:** Used Matplotlib and Plotly to visualize interactive charts
- **Machine Learning 1 (Base on Stanford CS229)** DSLAB, NEU, Hanoi, Vietnam  
**Maths:** Understand how to construct the models and prove the algorithms mathematically.  
**Models:** Familiar with different types of regression models such as Linear, Ridge, Lasso, ElasticNet Regression, as well as classification models like SVM, K-mean, Decision Tree. Experienced Ensemble methods such as Decision Tree.

*Following sections items are clickable*

## CERTIFICATIONS

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| <ul style="list-style-type: none"><li>• <b>Certificate</b> <span style="float: right;">Received Date</span><br/>(Name and score(s) are given, if possible below)<ul style="list-style-type: none"><li>- IELTS 7.0 <span style="float: right;">Issued April 2019</span></li><li>- The Internet and Computing Core Certification: 2520 <span style="float: right;">Issued December 2019</span></li><li>- BLOCKCHAIN MATHEMATICS AND COMPUTING <span style="float: right;">Issued July 2021</span></li><li>- Qiskit Localization Contributor <span style="float: right;">Issued May 2021</span></li></ul></li></ul> |
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## PROJECTS

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- **Used car prediction project:** A personal project participated in a Kaggle Competition, to get the lowest Root Mean Squared Error(RMSE) when predicting the used car's price. NaNs in Numeric columns were replaced with mean. One-hot Encoding and Target Encoding were also used to encode categorical data. There were ten regression models used to train the data with the help of GridsearchCV. The best model was LGBMRegressor, which archived the RMSE of 119k, rank fourth in the competition.
- **Exploratory Data Analysis for Hotel dataset:** Work with a group of three as the leader for the midterm project of the Data Preparation and Visualization course to create an EDA for the Hotel dataset. The group used Python libraries such as NumPy for calculation, Pandas for data manipulation, Matplotlib, and Plotly for plotting data and creating interactive charts. The final result was 9 on a 10 scale.
- **Database Management System final project:** Directed a team of four to design and implement a database to manage a telecommunication company using SQL as a final project for Database Management System (DBMS). The database allows the company to create plans to serve prepaid and postpaid customers, manage cash flow, and log errors. The design also allows users to create feedback and rating. The final result received a nine on a ten scale.
- **Personal Website:** I want to make an introduction website for myself, so I taught myself HTML and CSS to build one and then used Github Pages to publish my website.