



# BUI THI THANH PHUONG

DATA SCIENTIST, AI ENGINEER

## OBJECTIVE

Throughout my learning journey, I have come to realize the importance of self-study and knowledge accumulation. Learning is a continuous process, and I aspire to continue learning new things in my field and master the application of the knowledge I have acquired. Concurrently with working to gain experience, I have set additional goals to stay updated on new methodologies, such as reading papers and researching advancements in those methods.

## PROJECTS



### PROVE THE JOHNSON-LINDENSTRAUSS LEMMA AND ITS APPLICATION IN DIMENSION REDUCTION.

// May 2023 - June 2023

- To prove the lemma, we utilize Gaussian Random Projection to demonstrate the mapping with a probability.
- Directly apply Johnson's lemma algorithm to perform dimensionality reduction on a dataset of 11,938 64x64 face images, then compare the performance of the lemma with the KNeighborsClassifier model.

### Hotel booking demand prediction // Nov 2022 - Dec 2022

- Build a supervised Machine Learning model for predicting hotel booking demand using scikit-learn, and evaluate the model using performance metrics such as Decision Tree, Logistic Regression, and Random Forest. Determine the best model for solving the problem.

### Classify customer sentiment analysis // Sep 2023 - Oct 2023

- Use some tools in the Natural Language Toolkit library such as: Tokenization, POS tagging... To analyze text
- Use Roberta Pretrained Model to evaluate customer reviews
- Compare the above results with star ratings using the matplotlib library

### Program in the Windows environment: Check if two shapes intersect. // June 2022

- Create objects of the shape class and check if a point is inside the shape.
- Find the intersection between two arbitrary objects and print the plus sign inside the intersection area.
- Implement algorithms using arrow keys to move one of the shapes, the plus and minus keys to zoom in or out of one of the two images. In the windows environment.

## ACTIVITIES



### SUMMER VOLUNTEER PROGRAM "GREEN SUMMER"

// Junly 2022 - August 2022

Creating opportunities for students to engage in knowledge exchange in Mathematics, Physics, Chemistry, and Biology, while also applying mathematical problem-solving skills to practical situations.

### VIASM Mathematics Summer School

// Junly 2022 - August 2022

## PROFILE

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📍 Thu Duc City

## SKILLS

DATA BASE  
SQL Server

PROGRAMMING LANGUAGES:  
Python, C/C++, R

TOOL & FRAMEWORK  
Jupyter Notebook, Git, Apache Spark,  
Pandas, Mathplotlib, SKlearn, Pytorch

DOMAIN KNOWLEDGE  
Language Modeling, Machine Learning,  
Probability and Statistics, Math concepts

OTHER  
Excel, Word, Spreadsheets

## EDUCATION

🎓 VNUHCM-UNIVERSITY OF SCIENCE

// October 2020 - Present

MATHEMATICS & COMPUTER SCIENCE

Score: 8.4/10

## INTERESTS

NLP, News

