

# Thao Nguyen Tran Thi

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## Education

### Ton Duc Thang University

Ho Chi Minh City, Vietnam

Bachelor of Science, Computer Science. GPA: 7.72/10 (Current)

Expected Graduation: October 2026

Relevant Coursework: Data Structures, Introduction to Artificial Intelligence, Machine Learning, Deep Learning, Natural Language Processing, Massive Data Processing.

## Experience

### University Project — Ton Duc Thang University

Ho Chi Minh City, Vietnam

#### Last-Mile Delivery Optimization Model (VRPTW, Tabu Search)

September 2025 – December 2025

- Developed a Vehicle Routing Problem with Time Windows (VRPTW) model using Tabu Search heuristic.
- Implemented Python modules for neighborhood generation, cost evaluation, and aspiration criteria.
- Analyzed trade-offs between travel distance, time windows, and fleet utilization using real-world dataset (Delivering Data – Zenodo).
- Visualized optimized delivery routes and algorithm performance metrics with Matplotlib and Pandas.

### Deep Learning Project — Ton Duc Thang University

Ho Chi Minh City, Vietnam

#### Visual Question Recognition Model (CNN and Transformer Decoder)

April 2024 – May 2024

- Built a neural architecture combining CNN for image feature extraction and Transformer Decoder for text generation.
- Trained on annotated visual-question datasets and achieved 89% BLEU score.
- Experimented with attention visualization and beam search for improved sequence generation.

### Machine Learning Project — Ton Duc Thang University

Ho Chi Minh City, Vietnam

#### VStock Price Prediction using Regression Models (Python, Sklearn)

September 2025 – October 2025

- Collected and cleaned VNIndex stock data for time-series forecasting.
- Built and compared Linear Regression, Lasso, and Random Forest models.
- Visualized performance metrics (RMSE,  $R^2$ ) and improved accuracy through feature scaling and hyperparameter tuning.

## Leadership & Activities

### Ton Duc Thang University

Ho Chi Minh City, Vietnam

#### Team Leader — Last-Mile Delivery Optimization Project (VRPTW, Tabu Search)

Month Year – Month Year

- Led a 3-member team to design and implement a VRPTW optimization model using Tabu Search.
- Coordinated weekly progress tracking and report submission.

### Ton Duc Thang University

Ho Chi Minh City, Vietnam

#### Team Leader — Massive Data Processing Course Project

Month Year – Month Year

- Directed a 4-member team to implement collaborative filtering and PageRank algorithms.
- Oversaw code integration and ensured timely completion of deliverables.

## Skills & Interests

**Technical:** Python, C#, SQL, TensorFlow, PyTorch, Scikit-learn, SQLite, Git, Google Colab, Kaggle

**Language:** Vietnamese (Native), English (Intermediate – IELTS 6.0)

**Laboratory:** Data Preprocessing, Model Training, Evaluation Metrics (F1-score, RMSE)

**Interests:** AI research, Data visualization, Reading tech blogs