

# THANH LONG LY

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 Thanh Long Ly

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## Education

2023 – 2027

 **National Economics University (NEU)**, Hanoi, Vietnam.

Major: Data Science in Economics and Business

CGPA: 3.51/4.0

*Relevant Coursework: Econometrics, Probabilities & Statistics, Deep Learning, Machine Learning, Data Structures & Algorithms.*

## Research Experience

2025 – Present

 **Research Assistant**, Predictive Models and Machine Learning Research Applications, NEU.

- Conducted data collection and statistical analysis to validate predictive models for economic indicators.
- Applied transformer-based models (e.g., BERT/RoBERTa) for Natural Language Processing tasks in business intelligence contexts.

2025 – 2026

 **Student Researcher**, Scientific Student Research Competition, NEU.

- Co-authored the paper "*The Regulatory Role of Provincial Governments in the Impact of Labor Shift on Agricultural Production Efficiency in Vietnam*", published in the *Proceedings of the National Scientific Conference 2024*.
- Recognized with the university-level "**Student Research Award 2026**" for research excellence.

## Research Publications

### Conference Proceedings

1

T. P. Trinh, A. T. Tran, T. L. Ly, A. K. Phan, Q. A. Bui, and N. H. Dang, "Agentic B2B2C AI - how AI has been transforming B2B2C e-commerce in vietnam," 2026.

2

M. D. Phung, B. D. T. Vu, T. L. Ly, T. H. T. Duong, and K. L. Pham, "The regulatory role of provincial governments in the impact of labor shift on agricultural production efficiency in Vietnam," in *Proceedings of the National Scientific Conference: Vietnam's Economy in 2024 and Prospects for 2025, Promoting Economic Institutional Reform in the New Context*, Hanoi, Vietnam: National Economics University Publishing House, 2025, pp. 488–501.

## Projects

2025 – Present

 **Rang Dong Sales Agent**, Rang Dong, Hanoi.

- Developed a Retrieval-Augmented Generation (RAG) conversational system using large language models (LLMs) and Vector Databases (Qdrant) to simulate guided product discovery.
- Designed a vector-based retrieval pipeline to map natural language queries to high-dimensional product features, significantly improving search relevance for complex user intents.

## Projects (continued)

- December, 2025
- **Gigabyte Sales Agent**, Hackathon “Master AI, Master Careers”, Ho Chi Minh City.
- Implemented an automated technical support agent using NLP techniques to handle domain-specific queries for hardware specifications.
  - Awarded 1st place for the architectural design and deployment of the solution.
- November, 2025
- **Hanoi Weather Forecast**, Group Project, National Economics University, Hanoi.
- Engineered a predictive machine learning model for time-series weather forecasting using Catboost and Scikit-learn.
  - Conducted comparative analysis of model performance metrics and visualized results using a custom dashboard.

## Working Experience

- 2025 – Present
- **AI Engineer Intern**, Alpha Data Academy, Hanoi, Vietnam.
- Developed an Agentic RAG System for Rang Dong, a company in the lighting industry.
  - Participated in the design of data ingestion pipeline for the system.
  - Optimized the response to be natural and human-like.

## Honors, Awards & Outreach

- 2025
- **Champion (1st Place)**, “Master AI, Master Career” Hackathon.
- Secured the championship title by designing a practical AI sales solution for Gigabyte, outperforming competing teams.
  - Recognized by judges for high business applicability and successful implementation of a customer-facing agent.
- 2024
- **Contestant**, Data Science Talent Competition, Foreign Trade University.
- Conducted exploratory data analysis (EDA) and visualization to uncover purchasing patterns and customer segmentation for a retail client.
  - Engineered features and trained a predictive machine learning model to forecast customer buying actions with high accuracy.

## Skills

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|-------------------|--|
| Languages         | ■ English (IELTS 7.0, 2022), Vietnamese, Chinese.  |
| Coding            | ■ Python, Swift, C++, SQL, JavaScript.   |
| Databases         | ■ MySQL, PostgreSQL, MongoDB, Supabase, Qdrant.  |
| Cloud, DevOps     | ■ AWS, Docker, Kubernetes, Git, GitHub, Jenkins, HuggingFace.                                |
| AI/ML Frameworks  | ■ PyTorch, TensorFlow, MLFlow, Scikit-learn, HuggingFace Transformers, LangChain, LangGraph. |
| Operation Systems | ■ Windows, Linux, macOS.   |