Ho Thi Minh Ngan

Research Assistant

PERSONAL INFORMATION

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SUMMARY

Research Assistant with experience in machine learning, reinforcement learning, and data science across healthcare, finance, and environmental projects. Strong research background with peer-reviewed publications, national and international conference presentations, and multiple awards. Research interests include Reinforcement Learning, ESG Data Analytics, AI for Smart Health, and Environmental Intelligence.

EDUCATION

- **National Economics University**
    - Bachelor of Information Technology - 2nd in Cohort
- **Scholarships:**
    - Vingroup – NEU Companion Scholarship (2 consecutive years)
    - SCG Group Scholarship (2 consecutive years)
    - Machine Learning Scholarship (VINBIGDATA & NAVER Group)

CERTIFICATE

- AI Vietnam – Advanced AI & Data Science Program (2024):

  Modules: Math, Programming, Data Science | Machine Learning | Deep Learning & Neural Networks | Computer Vision & NLP | Generative AI & LLMs

RESEARCH EXPERIENCE

Ministry-level Research Project (2024 – 2025)

- Automatic Multi-Document Summarization with Pre-trained Language Models and Deep Learning
- Developed an extractive summarization framework for educational applications.

Exploring Students' Intention to Use AI-Powered Apps - ICEED Conference Paper (2024)

- Conducted survey among NEU students to investigate determinants of technology adoption.
- Applied Technology Acceptance Model (TAM), analyzed data with regression analysis.
- Collaborated with a cross-disciplinary research team, contributed to data analysis and writing.

Research Project – Reinforcement Learning for Educational Recommender Systems (2023 – 2024)

- Modeled multiple-choice exam recommendation as a Markov Decision Process.
- Applied Deep Q-Learning for adaptive personalization.
- Second Prize - University-level Scientific Research Competition (2024).

EcoRevive Project – ESG Innovation (2024)

- Developed a smart recycling cabinet system.
- First Prize, SCG ESG Innovation Challenge.

Vietnam Youth's Policy Initiative – AI for Public Policy (2023)

- Proposed policies for applying AI in public consultation and citizen feedback systems.
- Conducted analysis on how machine learning models can enhance transparency and efficiency in public administration.
- Awarded First Prize at the VYPI 2023 Policy Innovation Challenge.

PUBLICATIONS & CONFERENCES

Ho Minh Ngan (2024), et al. *Exploring Students' Intention to Use AI-Powered Apps: A Cross-Disciplinary Investigation*. In Proceedings of the International Conference on Engineering Education (ICEED 2024).

Ho Thi Minh Ngan, et al. *Research on Applying Reinforcement Learning Algorithms for Recommender Systems in Multiple-Choice Exams.* National Conference: *Digital Transformation and Higher Education*, 2024.

WORK EXPERIENCE

VinUni (12/2025 – Now)

- Pro-environmental Behavior and Sustainable Behavior Analytics
- Environmental Intelligence and ESG Data Analytics
- Green Public Policy and Sustainable Decision-Making

MobiFone (05/2025 – 11/2025)

- Customer Lifetime Value Modeling: Applied ML and reinforcement learning to predict churn and optimize retention strategies.

FPT Corporation (02/2024 – 04/2025)

- Digital Health Platform: Extended OMOP CDM for healthcare interoperability, enabling evidence-based analytics.
- Mobile Application Optimization: Built anomaly detection & personalization models to enhance engagement.

Vietinbank (10/2023 – 01/2024)

- Customer Segmentation: Combined BERT embeddings + RL for adaptive classification under imbalanced data.
- Sentiment Analysis: Developed NLP models to classify customer sentiment across digital channels.

Vietsearch Global (04/2022 – 09/2023)

- Sentiment Analysis & Recommendation: Built ML-based keyword recommendation system and sentiment analysis for website optimization.

ACTIVITIES

- Leader - IT Lab NEU (2023 - present): Coordinated reinforcement learning & NLP research projects.
- Mentor - SheCodes Hackathon 2023: Guided participants in AI and coding solutions.
- Head of Communications - AI Vietnam (2024).

TECHNICAL SKILLS

- Programming & Data: Python (Pandas, Scikit-learn, TensorFlow), SQL (BigQuery, PostgreSQL), Java, C++.
- ML/AI: Predictive Modeling, Reinforcement Learning, NLP, Deep Learning.
- Visualization: Power BI, Tableau, Looker Studio, Superset.
- Academic writing