

#### Research Interests

My research focuses on post-training methods for (multimodal) LLMs, including RLHF and Reward Modeling. Additionally, I'm very interested in mechanistic interpretability and inference-time interventions for LLM safety alignment.

#### Education

#### The University of North Carolina at Chapel Hill

Aug. 2024 – Aug. 2029 (expected)

Ph.D. in Computer Science

North Carolina, US

• Advisor: Prof. Mohit Bansal

#### Hanoi University of Science and Technology

 $\mathbf{Sep.}\ \ \mathbf{2018}-\mathbf{Sep.}\ \ \mathbf{2022}$ 

B.S. in Computer Science

Hanoi, Vietnam

• GPA: 3.65/4.00, graduated with Excellent Degree

## Research Experience

VinAI Research Aug. 2022 – Aug. 2024

Research Resident

Hanoi, Vietnam

• Advisor: Prof. Viet Anh Nguyen

• Research topics: LLM Truthfulness, Algorithmic Recourse, Recommender System

#### **Publications**

Ngoc Bui, **Duy Nguyen**, Man-Chung Yue, and Viet Anh Nguyen. Coverage-Validity-Aware Algorithmic Recourse. In Operations Research, 2024.

Hieu Nguyen, **Duy Nguyen**, Khoa Doan, and Viet Anh Nguyen. Cold-start Recommendation by Personalized Embedding Region Elicitation. In *Conference on Uncertainty in Artificial Intelligence (UAI)*, 2024.

**Duy Nguyen**, Ngoc Bui, and Viet Anh Nguyen. Distributionally Robust Recourse Action. In *International Conference on Learning Representations (ICLR)*, 2023.

**Duy Nguyen**, Ngoc Bui, and Viet Anh Nguyen. Feasible Recourse Plan via Diverse Interpolation. In *International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2023.

Ngoc Bui, **Duy Nguyen**, and Viet Anh Nguyen. Counterfactual Plans under Distributional Ambiguity. In *International Conference on Learning Representations (ICLR)*, 2022.

Tuan-Duy H. Nguyen, Ngoc Bui, **Duy Nguyen**, Man-Chung Yue, and Viet Anh Nguyen. Robust Bayesian Recourse. In Conference on Uncertainty in Artificial Intelligence (UAI), 2022.

### **Preprints**

**Duy Nguyen**\*, Archiki Prasad\*, Elias Stengel-Eskin, and Mohit Bansal. LASeR: Learning to Adaptively Select Reward Models with Multi-Arm Bandits. *Under Review*.

Bao Nguyen, Binh Nguyen, **Duy Nguyen**, and Viet Anh Nguyen. Semantically-Consistent, Distributional Intervention Policies for Language Models. *Under Review*.

**Duy Nguyen**, Bao Nguyen, and Viet Anh Nguyen. Cost Adaptive Recourse Recommendation by Adaptive Preference Elicitation. *Under Review*.

#### Honors and Awards

# Honorable Mention - Undergraduate Operations Research Prize INFORMS

Oct. 2022

Best thesis presentation award

Aug. 2022

 $School\ of\ Information\ and\ Communication\ Technology,\ HUST$ 

Excellence Scholarship for the academic year

Sep. 2019

 $School\ of\ Information\ and\ Communication\ Technology,\ HUST$ 

## **Professional Academic Services**

Reviewer at ICLR (2025), NeurIPS (2023, 2024), AISTATS (2022, 2023), UAI (2023), ACM FAccT (2023).