Duy Khuong Nguyen

email website github

Research Interests

My research interests lie in the intersection of model interpretability and robustness in machine learning. Lately, I have been focusing on post-hoc explanations, recommender systems, and large language models.

Research Experience

VinAI Research **Aug. 2021 – Present**
Research Resident *Hanoi, Vietnam*

- Advisor: Prof. Viet Anh Nguyen
- Research topic: Algorithmic Recourse, Recommender System, Distributionally Robust Optimization

Publications

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

Ngoc Bui, **Duy Nguyen**, Man-Chung Yue, and Viet Anh Nguyen. Coverage-Validity-Aware Algorithmic Recourse. *Under Review.*

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

Education

Hanoi University of Science and Technology **Sep. 2018 – Sep. 2022**
Bachelor in Computer Science *Hanoi, Vietnam*

- GPA: 3.65/4.0, Major GPA: 3.78/4.0
- Thesis: Multi-task calibration of Sensory Data with Generative Adversarial Networks

Honors and Awards

Honorable Mention - Undergraduate Operations Research Prize **Oct. 2022**
INFORMS

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 Services

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

Technical Skills

Languages: Python, C/C++, Java
ML Frameworks: PyTorch, Tensorflow
Others: Git, Docker