

# QUANG-HUY (PERCY) NGUYEN

 Google Scholar

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## RESEARCH INTEREST

I am interested in *meta-learning*, *uncertainty estimation*, and *domain adaptation* for machine learning and computer vision. In particular, my research focuses on *learning with imperfect data* (e.g., limited, noisy, or imbalanced) under *minimal human supervision*, while enabling effective *extrapolation and adaptation to unseen domains* beyond the training set. Application-wise, I am working on *medical imaging* and *animal behavior analysis*, where handling limited data with minimal supervision is vital.

## EDUCATION

- **Ph.D. in Computer Science and Engineering** 2024 – Now  
College of Engineering, **The Ohio State University**
  - **Research areas:** medical imaging, animal behavior prediction, OOD detection, PEFT
  - **Advisor:** Prof. [Wei-Lun \(Harry\) Chao](#)
- **B.Eng. in Computer Engineering** 2015 – 2020  
**University of Information Technology**, Vietnam National University - Ho Chi Minh City

## PREPRINTS AND PUBLICATIONS

- [1] Ping Zhang\*, Zheda Mai\*, **Quang-Huy Nguyen**, and Wei-Lun Chao. [Revisiting semi-supervised learning in the era of foundation models](#). *NeurIPS*, 2025.
- [2] Zheda Mai, Ping Zhang, Cheng-Hao Tu, Hong-You Chen, **Quang-Huy Nguyen**, Li Zhang, and Wei-Lun Chao. [Lessons learned from a unifying empirical study of parameter-efficient transfer learning \(PETTL\) in visual recognition](#). *CVPR*, 2025 (**highlight, 2.98%**).
- [3] **Quang-Huy Nguyen\***, Jin Zhou\*, Zhenzhen Liu\*, Khanh-Huyen Bui, Kilian Q. Weinberger, Wei-Lun Chao, and Dung D. Le. [Detecting Out-of-Distribution Objects through Class-Conditioned Inpainting](#). *preprint*, 2025.
- [4] Minh-Duc Nguyen, Phuong M. Dinh, **Quang-Huy Nguyen**, Long P. Hoang, and Dung D. Le. [Improving Pareto Set Learning for Expensive Multi-objective Optimization via Stein Variational Hypernetworks](#). *AAAI*, 2025.
- [5] **Quang-Huy Nguyen**, Cuong Q. Nguyen, Dung D. Le, and Hieu H. Pham. [Enhancing Few-shot Image Classification with Cosine Transformer](#). *IEEE Access*, 2023.

## RESEARCH EXPERIENCE

- **Graduate Research Assistant – CSE, The Ohio State University** Aug 2024 – Now  
Columbus, OH  
*Advised by:* Prof. [Wei-Lun \(Harry\) Chao](#)
  - Forecasting for animal behavior estimation
  - Multi-sample learning for Pancreatic pre-cancer diagnostic
- **AI Research Resident – FPT Software AI Residency Program** Aug 2023 – Jul 2024  
Ho Chi Minh City, Vietnam  
*Advised by:* Prof. [Dung D. Le](#)
  - Zero-shot Out-of-distribution with Generative Models
- **Research Assistant – CECS, VinUniversity** Nov 2022 – Jul 2023  
Ha Noi, Vietnam  
*Advised by:* Prof. Dung D. Le
  - Pareto Front Learning for Expensive Multi-objective Optimization
- **Research Assistant – VinUni-Illinois Smart Health Center, VinUniversity** Jan 2022 – Jun 2022  
Ha Noi, Vietnam  
*Advised by:* Profs. Dung D. Le and Hieu H. Pham
  - Few-shot learning for healthcare imaging

## RESEARCH AND TECHNICAL SKILLS

- **Research Domains:** Machine Learning, Computer Vision, Deep Learning Optimization
- **Research Interests:** Generative Model, Domain Adaptation, Uncertainty Estimation, Bayesian Optimization
- **Research Skills:** Optimization, Visualization, Experimental Design, Statistical Analysis, Data Processing
- **Programming Languages:** Python (primary)
- **Frameworks & Technologies:** PyTorch, TensorFlow, OpenCV, [WandB](#), Bash, Git, Vim, L<sup>A</sup>T<sub>E</sub>X
- **Machine Learning Tools:** NumPy, Pandas, SciPy, scikit-learn, Matplotlib, [Einops](#), [PyMOO](#)