

Khoi Duc Nguyen

PhD Student, University of Wisconsin-Madison

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Education

University of Wisconsin-Madison

PhD in Computer Science

Wisconsin, US

Sep 2023 – Present

- GPA: 3.83/4.0
- Currently working with Professor Yin Li

Ho Chi Minh City University of Technology (HCMUT)

B.Eng in Computer Engineering

Ho Chi Minh, Vietnam

Sep 2017 – Dec 2021

- GPA: 9.1/10.0

Experience

SilverAI

AI Engineer

Hanoi, Vietnam

May 2024 - Aug 2024

- Developed and implemented hairstyle-changing feature using diffusion generative models.
- Mentored an intern on processing data and fine-tuning deep learning models.

National University of Singapore

AI Research Intern

Singapore

Jun 2022 - May 2023

- Conducted research on few-shot 2D pose estimation. Designed a Bayesian framework for learning prior knowledge from base data and transferring it to unseen data (CVPR 2024).
- Advisors: Chen Li, Gim Hee Lee.

VinAI Research

AI Research Resident

Ho Chi Minh, Vietnam

Nov 2020 - Jun 2022

- Conducted multiple research projects on few-shot learning, contributing to advancements in model generalization with limited data.
- Proposed a novel method for video classification that independently analyzes temporal and appearance information (ECCV 2022).
- Contributed to a method that improves in-distribution data classification by leveraging out-of-distribution data (Neurips 2021).
- Implemented a color calibration module for bird's-eye view cameras in autonomous driving systems.
- Advisors: Rang Nguyen, Quoc-Huy Tran (Retrocausal), Binh Son Hua.

Selected Publications

[1] ESCAPE: Encoding Super-keypoints for Category-Agnostic Pose Estimation

Khoi Duc Nguyen, Chen Li, Gim Hee Lee

In *Conference on Computer Vision and Pattern Recognition (CVPR)*, 2024.

[2] Inductive and Transductive Few-Shot Video Classification via Appearance and Temporal Alignments

Khoi Duc Nguyen, Quoc-Huy Tran, Khoi Nguyen, Binh-Son Hua, Rang Nguyen

In *European Conference on Computer Vision (ECCV)*, 2022.

[3] POODLE: Improving Few-shot Learning via Penalizing Out-of-Distribution Samples

Duong H. Le*, Khoi Duc Nguyen*, Khoi Nguyen, Quoc-Huy Tran, Rang Nguyen, Binh-Son Hua

In *Proc. 35th Conference on Neural Information Processing Systems (NeurIPS)*, 2021.

Awards

Third Prize in the final round of Digital Race, FPT.

2020

Scholarships for outstanding academic achievements, HCMUT.

2018, 2019, 2021

Valedictorian of the 2017 intake, highest score in university entrance exam, HCMUT.

2017

Gold Medal in Vietnam Southern Regional Olympiad in Mathematics.

2016

Services

Conference Reviewer: ECCV 2024, CVPR 2023, NeurIPS 2023

Teaching

Teaching Assistant, *University of Wisconsin-Madison*

Wisconsin, US

CS240: Introduction to Discrete Mathematics

Fall 2024

CS354: Machine Organization and Programming

Spring 2024

CS240: Introduction to Discrete Mathematics

Fall 2023

Technical Skills

Library: Pytorch, Numpy, Jax