

Hoang Khoi Do

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Education

CS PhD Student [Trinity College of Dublin](#)

- Research: Language-driven 3D Content Generation, led by Dr. Binh-Son Hua.

Dublin, Ireland 2024-2028

Bachelor of Science [Hanoi University of Science and Technology](#)

- Program: Advanced Electronics and Telecommunication (Full-Time English Program)

Hanoi, Vietnam 2020-2024

Research Interest

My research interests include conditional 3D Content Synthesis and (3D) Computer Vision. Specifically, I am interested in 3D-based / Multi-view Diffusion Model, Diffusion & Flow Matching based Score Distillation, and Continuous Masked Autoregressive Model for Continuous 3D Generation.

Publications

- [\[paper\]](#)[\[code\]](#). **Khoi Do**, Binh-Son Hua, Text-to-3D Generation using Jensen-Shannon Score Distillation. International Conference on 3D Vision, 3DV 2026.
- [\[paper\]](#)[\[code\]](#). **Khoi Do**, Duong Nguyen, Nam-Khanh Le, Quoc-Viet Pham, Binh-Son Hua, and Won-Joo Hwang, "Domain Generalization via Pareto Optimal Gradient Matching", 28th ECAI, 2025.
- [\[paper\]](#)[\[code\]](#). **Khoi Do**, Nguyen, D., Tran, N. H., and Nguyen, V. D., "PAT: Pixel-wise Adaptive Training for Long-tailed Segmentation", Pattern Recognition Letters, 2025.
- [\[paper\]](#)[\[code\]](#). **Khoi Do**, Nguyen, D., Nguyen, H., Tran-Thanh, L., Tran, N.-H., and Pham, Q.-V., "Revisiting LARS for Large Batch Training Generalization of Neural Networks", IEEE Transactions on Artificial Intelligence, 2025.

Working Experience

AI Research Engineer [Gotit - ScanIt Vietnam \(DayOne\)](#)

Hanoi, Vietnam 06/2023 - 06/2024

- Developed a **3D Geometry Restoration** pipeline for **document dewarping**, utilizing **Structural and Textual Line Matching** to correct perspective distortion.
- Training **light-weight** (< 5M params) models for **document information extraction, OCR, and classification** (~ 2000 documents/seconds).

AI Research Engineer [TrueID - VNG Corporation \(Tencent-invested\)](#)

Hanoi, Vietnam 11/2022 - 11/2023

- Researching on **document dewarping** by modeling the problem as a 3D surface reconstruction task, utilizing **Control Points Prediction** to correct geometric distortions.
- Secured a **\$1M R&D contract** with **Asia Commercial Bank** by designing a **lightweight**, high-throughput anomaly detection system, outperforming competitor benchmarks in accuracy and latency.

Software Engineer [ADT Creative - ADT Group](#)

Hanoi, Vietnam 7/2019 - 9/2020

- Developing AR/VR/MR motion-tracking applications and games with **Unity** and **Vulforia**. Within 2 years, more than 20 contracts from the Entertainment groups for Music Festival Advertisements, local branding store for production trial.

Skills

- **Foundations:** (3D) Computer Vision, (3D) Deep Learning, and Computational Geometry.
- **Programming Languages:** Python, C++, C, Blender Scripting, CUDA (basic).
- **Deep Learning Frameworks:** Pytorch, TensorFlow, Diffusers.
- **(3D) Computer Vision Frameworks:** Trimesh, Open3D, Pytorch3D, OpenCV, Scikit-Learn, Scikit-Image.
- **(3D) Software:** Blender, Unity, Git, Matlab, Docker, KubeFlow.

Academic Service

Reviewer

2024 - 2025

- ICLR 2025, 3DV 2026, ICLR 2026, CVPR 2026.

Reference

- Assist. Prof. Binh Son Hua - [✉](#) - School of Computer Science and Statistics, Trinity College Dublin.
- Assoc. Prof. Nguyen Hoang Tran - [✉](#) - School of Computer Science, the University of Sydney.
- Full. Prof. Long Tran-Thanh - [✉](#) - Department of Computer Science, University of Warwick.
- Assist. Prof. Quoc-Viet Pham - [✉](#) - School of Computer Science and Statistics, Trinity College Dublin.