QUAN DAO

Curriculum Vitae

✉ kevinquandao10@gmail.com
 Github   Google Scholar

▬▬▬ Research Interest

My research focuses on generative modeling in computer vision, encompassing both fundamental principles and practical applications. Since 2022, I have been investigating diffusion models, aiming to address the challenges of efficient and robust training. More recently, I have begun exploring the potential of autoregressive models for visual synthesis, with an emphasis on their downstream applications in generative modeling.

▬▬▬ Education

2018–2021 : **Bachelor of Computer Science**, *Monash University*, Melbourne.
2024–Now : **PhD in Computer Science**, *Rutgers University*, New Jersey.

▬▬▬ Work Experience

2024 – Now **Teaching Assistant at Rutgers University**.
2022 – 2024 **Research Resident at VinAI**.

▬▬▬ Publications

My primary research's direction is diffusion model and its application. Recently, I also focus on the autoregressive model. Here is my list of publications. (* denotes first author.)

In Conference Proceedings

2025 **Quan Dao***, Hao Phung*, Trung Dao, Dimitris Metaxas, and Anh Tran. Self-corrected flow distillation for consistent one-step and few-step image generation. **Association for the Advancement of Artificial Intelligence (AAAI)**, 2025.

2024 **Quan Dao***, Binh Ta*, Tung Pham, and Anh Tran. A high-quality robust diffusion framework for corrupted dataset. In **Proceedings of the European Conference on Computer Vision (ECCV)**, 2024.

2024 Hao Phung*, **Quan Dao***, Trung Dao, Hoang Phan, Dimitris Metaxas, and Anh Tran. Dimsum: Diffusion mamba - a scalable and unified spatial-frequency method for image generation. In **Proceedings of the Neural Information Processing Systems (NeurIPS)**, 2024.

2023 Hao Phung*, **Quan Dao***, and Anh Tran. Wavelet diffusion models are fast and scalable image generators. In **Conference on Computer Vision and Pattern Recognition (CVPR)**, 2023.

2023 Thanh Le*, Hao Phung*, Thuan Nguyen*, **Quan Dao***, Ngoc Tran, and Anh Tran. Anti-dreambooth: Protecting users from personalized text-to-image synthesis. In **International Conference on Computer Vision (ICCV)**, 2023.

Preprint - Under-review

2024 **Quan Dao***, Khanh Doan*, Di Liu, Trung Le, and Dimitris Metaxas. Improved training technique for latent consistency models. *Under-review*, 2024.

2024 **Quan Dao***, Khanh Doan, Xiaoxiao He, Ligong Han, Dinh Phung, Trung Le, and Dimitris Metaxas. Text-to-image editing for visual autoregressive generation. *Under-review*, 2024.

2024   Xiaoxiao He, Ligong Han, **Quan Dao**, Song Wen, Minhao Bai, Di Liu, Han Zhang, Martin Renqiang Min, Felix Juefei-Xu, Chaowei Tan, et al. Dice: Discrete inversion enabling controllable editing for multinomial diffusion and masked generative models. *arXiv preprint arXiv:2410.08207*, 2024.

2023   **Quan Dao***, Hao Phung*, Binh Nguyen, and Anh Tran. Flow matching in latent space. *arXiv preprint arXiv:2307.08698*, 2023.

Academic Achievements

2017   **Second prize** in **VMO 2017 (Vietnam Mathematical Olympiad)**

2016   **Bronze Medal** in **Vietnam North Mathematical Olympiad**

2016   **Third Prize** in **International Mathematics Tournament of Towns**

Professional Services

I serve as the conference reviewer for both machine learning and computer vision top-tier conferences: **CVPR, ECCV, NeurIPS, AISTATS, ICML and ICLR.**

Skills

Languages   English, Vietnamese

Coding   Python, Pytorch, LaTeX

My Mentor

Rutgers Uni   Board of Governors and Distinguished Professor of Computer Science, **Prof. Dimitris Metaxas**, dnm@cs.rutgers.edu (Rutgers University)

VinAI   Head of VinAI Computer Vision Group, **Dr. Anh Tran**, v.anhtt152@vinai.io (VinAI)