Viet Nguyen ☑ viettmab123@gmail.com | ② viettmab.github.io | ♡ viettmab | in viettmab

EDUCATION

Hanoi University of Science and Technology (HUST)

Hanoi, Vietnam

Engineer's Degree, Information Technology

2019 - 2023

- Highest GPA in graduating class (3.93/4.0)
- Thesis: Some improvements for Diffusion Probabilistic Models

Publications

(*) denotes equal contribution

Viet Nguyen*, Giang Vu*, Tung Nguyen Thanh, Khoat Than, Toan Tran, "On Inference Stability for Diffusion Models", Oral Presentation (Top 2%) in Proceedings of the 38th AAAI Conference on Artificial Intelligence, 2024. [pdf]

PREPRINTS

(*) denotes equal contribution

Viet Nguyen*, Anh Nguyen*, Trung Dao, Khoi Nguyen, Cuong Pham, Toan Tran, Anh Tran, "SNOOPI: Supercharged One-step Diffusion Distillation with Proper Guidance", *Under Review*, 2024. [pdf, page]

Bao Tran*, Viet Nguyen*, Anh Tran, Toan Tran, "Dual-Model Defense: Safeguarding Diffusion Models from Membership Inference Attacks through Disjoint Data Splitting", Under Review, 2024. [pdf]

EXPERIENCE

VinAI Research Feb 2023 - Now

AI Research Resident

- Advisor: Dr. Toan Tran, Dr. Anh Tran
 - Research interest: Diffusion Models, Multimodal Learning, Trustworthy GenAI
 - Past works:
 - * Proposed a novel sequence-aware loss function to enhance image quality in unconditional diffusion models.
 - * Improved the quality and controllability of one-step text-to-image diffusion models.
 - * Developed a defense method to protect diffusion models from membership inference attacks.

School of Information and Communications Technology, HUST

Oct 2024

Teaching Assistant

• Course: Generative AI Engineering

VinAI Research Apr - Jul 2024

AI Research Engineer

- Advisor: Dr. Dzung Nguyen, Dr. Anh Tran, Dr. Toan Tran
- Personalized Text-to-Image Diffusion model: Built a celebrity dataset, trained personalized diffusion models, and distilled them into few-step model for faster generation.
- Diffusion models for generating Zoom background images: Fine-tuned to produce high-quality, landscape-resolution outputs.

Data Science Lab, HUST

Mar 2021 - Aug 2023

AI Research Assistant

- Advisor: Assoc. Prof. Khoat Than
- Research interest: Deep Generative Models, Diffusion Models
- Acquired background knowledge and reimplemented VAEs, GANs, and Diffusion Models.
- Conducted seminars on generative models and mentored newcomers through reimplementation projects and technical guidance.

AWARDS AND ACHIEVEMENTS

Awarded Excellent Scholarship in all semesters (HUST)	2019 - 2023
Honored with the highest GPA among all students in the graduating class of 2023 (HUST)	Sep 2023
Won the Best Thesis Presentation Award (HUST)	Aug 2023
Secured 2 nd position at Developer Circles Vietnam Innovation Challenge in Hanoi	Dec 2020

CERTIFICATIONS

Python for Everybody Certificate issued by University of Michigan	Aug - Sep 2020
Machine Learning Certificate issued by Stanford University	Sep 2020
Deep Learning Specialization Certificate issued by deeplearing ai	Sep - Oct 2020

TECHNICAL SKILLS

Languages: C, Python

 $\textbf{Tools} \hbox{: } {\rm PyTorch}, \ {\rm TensorFlow}, \ {\rm Git}$

References

Dr. Toan Tran

Research Scientist, Head of Machine Learning team, Vin
AI Research, Vietnam v.toantm3@vinai.io

Dr. Anh Tran

Senior Research Scientist, Head of Computer Vision team, Vin
AI Research, Vietnam v.anhtt152@vinai.io

Assoc. Prof. Khoat Than

 $\begin{array}{l} \mbox{Director of Data Science Laboratory, HUST} \\ \mbox{khoattq@soict.hust.edu.vn} \end{array}$