Minho Park

Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea
+821099689143 • m.park@kaist.ac.kr • pmh9960.github.io

Research Interest

I have a strong interest in the domain of generating synthetic data via generative models. Currently, my research is centered on improving the vision-language models by utilizing large-scale pre-trained models in the data-scarce settings.

Keywords

- Synthetic data generation via generative models
- Generative models, especially diffusion models
- Data-scarce settings

Education

Korea Advanced Institute of Science and Technology (KAIST) — **Daejeon, Republic of Korea**
Ph.D. in Artificial Intelligence, GPA: 4.00/4.3 — *Mar. 2024 - Present*
- Advisor: Jaegul Choo

Korea Advanced Institute of Science and Technology (KAIST) — **Daejeon, Republic of Korea**
M.S. in Artificial Intelligence, GPA: 4.00/4.3 — *Sep. 2021 - Feb. 2024*
- Advisor: Jaegul Choo

Korea University — **Seoul, Republic of Korea**
B.S. in Electrical Engineering, GPA: 4.11/4.5 — *Mar. 2018 - Aug. 2021*

Gyeonggi Science High School for the Gifted — **Suwon, Republic of Korea**
Mar. 2015 - Feb. 2018

Publications

Under review

[U2]: **Minho Park**, Sunghyun Park, Jooyeol Yun, and Jaegul Choo. "Unlocking the Potential of Generated Datasets in Name-only Transfer of Vision-Language Models"

[U1]: Jeongho Kim, Gyojung Gu, **Minho Park**, Sunghyun Park, and Jaegul Choo "StableVITON: Learning Semantic Correspondence with Latent Diffusion Model for Virtual Try-On" [Paper] [Code] [Project Page]

Conference Paper

[C2]: **Minho Park***, Jooyeol Yun*, Seunghwan Choi, and Jaegul Choo. "Learning to Generate Semantic Layouts for Higher Text-Image Correspondence in Text-to-Image Synthesis." *IEEE/CVF International Conference on Computer Vision (ICCV), 2023, Paris, France.* [Paper] [Code] [Project Page]

[C1]: Jooyeol Yun*, Sanghyeon Lee*, **Minho Park***, and Jaegul Choo. "iColoriT: Towards Propagating Local Hint to the Right Region in Interactive Colorization by Leveraging Vision Transformer." *IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2023, Waikoloa, Hawaii.* [Paper] [Code] [Project Page]

Work Experience

Qualcomm AI Research — **Seoul, Republic of Korea**
Research Intern — *Mar. 2024 - Present*
- Data generation via generative models

Academic Activities

Conference reviewers: CVPR'24

Talks and Slides

- Various Types of Diffusion Models [Slides]
- Segment Anything [Slides]
- Classification with Foundation Models [Slides]
- Consistency Models and BOOT [Slides]
- DDPM [Slides]

Teaching Experience

AI Workshop Instructor

LG AI Research: Data generation via generative models, *Feb. 2024.*

Deepnoid Tech Meet: Various types of diffusion models, *Dec. 2023.*

SKT Market Top AI: Segment Anything, *Sep. 2023.*

YearDream School: Computer Vision, *Aug. 2023 - Sep. 2023.*

AIGS Symposium: Learning to Generate Semantic Layouts for Higher Text-Image Correspondence in Text-to-Image Synthesis, Oral session, *Aug. 2023.*

SKT Market Top AI: Classification with foundation models, *Jul. 2023.*

Samsung-Elice Leader Digital Agility: Tutoring deep learning, *Nov. 2022 - Nov. 2022.*

Goorm K-Digital Training: Linear Algebra, *Nov. 2022 - Nov. 2022.*

Teaching Assistant

[AI618] Generative and Unsupervised Deep Learning: KAIST, *Sep. 2023 - Dec. 2023.*

DAVIAN basic study: Linear Algebra, *Jul. 2023 - Aug. 2023.*

SK ML Engineer Course: Computer Vision, *Jun. 2023 - Jul 2023.*

DAVIAN basic study: Computer Vision, *Jan. 2023 - Feb. 2023.*

DAVIAN basic study: Computer Vision, *Jul. 2022 - Aug. 2022.*

Samsung-SNU AI Expert Course: Linear Algebra, *May. 2022*

Reference

Jaegul Choo
Associate Professor

KAIST
jchoo@kaist.ac.kr