Minguk Kang

mgkang@postech.ac.kr | Homepage | Google Scholar | GitHub Chungam-Ro 77, POSTECH, Pohang-Si, Republic of Korea (37673)

EDUCATION POSTECH, Pohang, Republic of Korea

M.S. in Graduate School of AI

Feb 2020 – Present

- Interest: Contrastive Learning, Generative Adversarial Networks
- GPA: 4.11/4.30

Pusan National University, Busan, Republic of Korea

■ B.S. in Engineering

Mar 2013 – Aug 2019

- Major: Mechanical Engineering, Minor: Statistics
- Summa Cum Laude (graduated at the top of college of engineering, 1/394)

RESEARCH EXPERIENCE

Adobe Research Creative Intelligence Lab, Remote work at South Korea

Research Intern

Jul 2022 – Present

• Advisers: Dr. Taesung Park and Dr. Sylvain Paris

Computer Vision Laboratory, Pohang, Republic of Korea

Graduate Student

Feb 2020 – Present

· Adviser: Professor Jaesik Park

Vision and Intelligent System Laboratory, Pusan National University

Undergraduate Research Student

Aug 2017 - Jan 2020

• Adviser: Professor Dongjoong Kang

PUBLICATIONS

CONFERENCES

- [C5] Minguk Kang, Jun-Yan Zhu, Richard Zhang, Jaesik Park, Eli Shechtman, Sylvain Paris, and Taesung Park, "Scaling up GANs for Text-to-Image Synthesis", In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Highlight, 2023.
- [C4] Jinoh Cho, Minguk Kang, Vibhav Vineet, and Jaesik Park, "Context-Aware Image Completion", Under submission, 2022.
- [C3] Minguk Kang, Woohyeon Shim, Minsu Cho, and Jaesik Park, "Rebooting ACGAN: Auxiliary Classifier GANs with Stable Training", In *International Conference on Neural Information Processing Systems (NeurlPS)*, 2021.
- [C2] Minguk Kang and Jaesik Park, "ContraGAN: Contrastive Learning for Conditional Image Generation", In International Conference on Neural Information Processing Systems (NeurlPS), 2020.
- [C1] Minguk Kang, Honghyun Kim, and Dongjoong Kang, "Finding a High Accuracy Neural Network for the Welding Defects Classification Using Efficient Neural Architecture Search via Parameter Sharing", In *International Conference on Control Automation and Systems (ICCAS)*, IEEE, 2018, pp. 402-405.

JOURNALS

- [J2] Minguk Kang, Joonghyuk Shin, and Jaesik Park, "StudioGAN: A Taxonomy and Benchmark of GANs for Image Synthesis", *arXiv*:2206.09479, 2022.
- [J1] Hyojung Ahn, Hanlim Choi, Minguk Kang, and Sungtae Moon, "Learning-Based Anomaly Detection and Monitoring for Swarm Drone Flights", *Applied Science*, 2019, 9, 5477.

OPEN SOURCE

PyTorch StudioGAN (★3100+)

Pytorch library providing implementations of representative Generative Adversarial Networks (GANs).

AWARDS & SCHOLARSHIP

1st Prize, BK21 outstanding paper awards, POSTECH Graduate School of AI, January 2022

Qualcomm Innovation Fellowship Korea, Qualcomm, November 2021

Silver Prize, 16th Samsung Electro-Mechanics Paper Awards, 2020

National Science and Engineering Scholarship, Korea Student Aid Foundation

• Received full scholarship for 8 semesters.

Mar 2013 – Aug 2019

TALKS Tech Talk:

- Scaling up GANs for Text-to-Image Synthesis, Kakao Brain, NAVER, and LG AI Research, 2023.
- Demystifying the Instability in ACGAN and Providing Large-scale GAN Benchmark for Fair Evaluation, UNIST, 2022.
- Rebooting ACGAN: Auxiliary Classifier GANs with Stable Training, NAVER and EIRIC.

ACADEMIC SERVICES

Reviewer

- Conference Reviewer 2023: ICML, ICCV, NeurIPS
- Journal Reviewer 2022: IJCV
- Conference Reviewer 2022: ICLR, CVPR, ECCV, NeurIPS

PROFICIENCIES

General Skill

- Language: Korean (Native), English (Conversational)
- Machine Learning Library: TensorFlow (Advanced), PyTorch (Advanced)