

Minguk Kang

mgekang@postech.ac.kr | 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 South Korea

- Research Intern Jul 2022 – Present
 - Adviser: Dr. Taesung Park and Dr. Sylvain Paris

Computer Vision Laboratory, Pohang, Republic of Korea

- Graduate Student Feb 2020 – Present
 - Adviser: Professor Jaesik Park

Korea Aerospace Research Institute, Daejeon, Republic of Korea

- Research Participant Jul 2019 – Aug 2019
- Developed a deep learning model to detect anomalous behavior of drones during actual swarm flight test.

Vision and Intelligent System Laboratory, Pusan National University

- Undergraduate Research Student Aug 2017 – Jan 2020
 - Adviser: Professor Dongjoong Kang

PUBLICATIONS CONFERENCES

- [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 (NeurIPS)*, 2021.
- [C2] [Minguk Kang](#) and [Jaesik Park](#), “ContraGAN: Contrastive Learning for Conditional Image Generation”, In *International Conference on Neural Information Processing Systems (NeurIPS)*, 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**
- Representative Research Achievement:**
- StudioGAN: A Taxonomy and Benchmark of GANs for Image Synthesis, The Graduate School of AI Symposium, 2022.
- Tech Talk:**
- Demystifying the Instability of ACGAN and Providing Large-scale GAN Benchmark for Fast and Fair Evaluation, UNIST, 2022.
 - Rebooting ACGAN: Auxiliary Classifier GANs with Stable Training, NAVER and EIRIC.
- ACADEMIC SERVICES**
- Reviewer**
- Journal Reviewer 2022: IJCV
 - Conference Reviewer 2022: ICLR, CVPR, ECCV, Neurips
 - Conference Reviewer 2021: MVA, ICCV
- PROFICIENCIES** **General Skill**
- Language: Korean (Native), English (Conversational)
 - Machine Learning Library: TensorFlow (Advanced), PyTorch (Advanced)