# **Kyoungkook Kang**

## PhD Candidate POSTECH

PIAI 341, POSTECH, 77 Cheongam-Ro, Nam-Gu, Pohang, Gyeongbuk, Korea 37673 kkang831@postech.ac.kr https://kkang831.github.io

### **EDUCATION**

Mar. 2020 ~	Pohang University of Science and Technology	Pohang,
Present	Department of Computer Science and Engineering	Korea
	Advisor: Sunghyun Cho	
	Ph.D. Student	
Mar. 2017 ~	Daegu Gyeongbuk Institute of Science and Technology	Daegu,
Feb. 2019	Department of Electrical Engineering & Computer Science	Korea
	Thesis: Interactive and Automatic Navigation for 360° Video	
	Playback	
	Advisor: Sunghyun Cho	
	M.S. in Information and Communication Engineering	
Mar. 2013 ~	Hanyang University	Seoul,
Feb. 2017	Department of Electronic Engineering	Korea
	B.S. in Electronic Engineering	

# **PUBLICATIONS (INTERNATIONAL)**

- 1. **Kyoungkook Kang**, Sunghyun Cho, "Interactive and automatic navigation for 360° video playback", *ACM TRANSACTIONS ON GRAPHICS (SIGGRAPH 2019)*
- 2. **Kyoungkook Kang**, Seongtae Kim, Sunghyun Cho, "GAN Inversion for Out-of-Range Images with Geometric Transformations", *The IEEE/CVF International Conference on Computer Vision (ICCV 2021)*
- 3. **Kyoungkook Kang**,Gyujin Sim,Geonung Kim,Donguk Kim,Seungho Nam,Sunghyun Cho, "LayeringDiff: Layered Image Synthesis via Generation, then Disassembly with Generative Knowledge", *ARXIV:2501.01197V1*, (2025)
- 4. Geonung Kim, **Kyoungkook Kang**, Seongtae Kim, Hwayoon Lee, Sehoon Kim, Jonghyun Kim, Seung-Hwan Baek, Sunghyun Cho, "BigColor: Colorization using a Generative Color Prior for Natural Images", *The European Conference on Computer Vision (ECCV 2022)*
- 5. Seongtae Kim, **Kyoungkook Kang**, Geonung Kim, Seung-Hwan Baek, Sunghyun Cho, "DynaGAN: Dynamic Few-shot Adaptation of GANs to Multiple Domains", *SIGGRAPH ASIA 2022*
- 6. Hwayoon Lee, **Kyoungkook Kang**, Hyeongmin Lee, Seung-Hwan Baek, Sunghyun Cho, "UGPNet: Universal Generative Prior for Image Restoration", *The IEEE/CVF Winter Conference on Applications of Computer Vision (WACV 2024)*
- 7. Hyeongmin Lee, Kyoungkook Kang (Equal Contribution), Jungseul Ok, Sunghyun Cho,

# **PUBLICATIONS (DOMESTIC)**

- Kyoungkook Kang, Sunghyun Cho, "Interactive and Automatic Panning for 360° Video Playback", IPIU 2018, (2018)
- 2. **Kyoungkook Kang**, Sunghyun Cho, "360° 비디오 재생을 위한 자동 패닝", KSC 2018 **(우수 논문상)**, (2018)
- 3. **Kyoungkook Kang**, Sunghyun Cho, "Interactive and Automatic Navigation for 360° Video Playback", KCGS 2019, Extended Abstract (석사논문상 최우수상), (2019)
- 4. **Kyoungkook Kang**, Seongtae Kim, Sunghyun Cho, "학습 가능한 옵티마이저를 이용한 고속 StyleGAN 인버전", IPIU 2021 (우수논문상 은상), (2021)
- 5. 김성태, 강경국, 조성현, "고해상도 GAN 영상 편집을 위한 중간 층 미리 보기", IPIU 2021, (2021)
- 6. **Kyoungkook Kang**, Seongtae Kim, Sunghyun Cho, "기하적 변형이 포함된 이미지의 GAN Inversion", KCGS 2021, Extended Abstract, (2021)
- 7. 김건웅, **강경국**, 김성태, 이화윤, 김세훈, 김종현, 조성현, "BigGAN 인버전을 활용한 흑백 영상 색상화", IPIU 2022, (2022)
- 8. 김성태, **강경국**, 김건웅, 백승환, 조성현, "다중 도메인으로의 적대적 생성 신경망의 동적 퓨샷 적응", KCGS 2022, Extended Abstract, (2022)
- 9. 이화윤, **강경국**, 이형민, 백승환, 조성현, "회귀 기반 신경망과 적대적 생성망을 함께 활용한 영상 복원", IPIU 2023, (2023)
- 10. 이형민, **강경국**, 옥정슬, 조성현, "비지도학습을 통한 텍스트 기반의 영상 톤 조정", IPIU 2024, (2024)

## **SELECTED AWARDS AND HONORS**

- 석사논문상 최우수상, KCGS 2019, Korea (Jul. 2019)
- Naver Ph.D Fellowship, Naver, Korea (Dec. 2021)
- Samsung Ph.D. Fellowship Award, Samsung Advanced Institute of Technology (SAIT), Korea (Mar. 2023)

#### **PATENTS**

- Sung Hyun, Cho, Kang Kyoungkook, "Apparatus and method for playing 360-degree video", KR-Registration No. 10-2179243-0000
- 2. 김건웅, 강경국, 김성태, 이화윤, 김종현, 김세훈, 백승환, 조성현, "흑백 이미지 내에 포함된 픽셀들 각각의 색 상을 생성하기 위한 전자 장치, 방법, 및 컴퓨터 판독 가능 저장 매체", KR-Application No. 10-2022-0114554

#### **PROFESSIONAL ACTIVITIES**

- Reviewer
  - IEEE Computer Vision and Pattern Recognition (CVPR)
  - European Conference on Computer Vision (ECCV)
  - IEEE International Conference on Computer Vision (ICCV)
  - International Journal of Computer Vision (IJCV)

IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)