

# Kunhee Kim

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## Education

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**Korea Advanced Institute of Science and Technology (KAIST)** South Korea  
*Ph.D. student in Artificial Intelligence (Advisor: Prof. Tae-Kyun Kim)* Mar 2023 – present

**Pohang University of Science and Technology (POSTECH)** South Korea  
*M.S. in Computer Science and Engineering (Advisor: Prof. Daijin Kim)* Aug 2022

**Seoul National University of Science and Technology (SeoulTech)** South Korea  
*B.S. in Electrical and Information Engineering* Feb 2020

## Work Experience

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**NAVER Cloud** South Korea  
*Resident, Visual Generation Team* Oct 2025 – Apr 2026

- Led end-to-end development of video diffusion models, including data pipeline, model design, and training
- Trained billion-scale models using distributed multi-node GPU systems
- Built and processed synthetic datasets for training OmniLLM [T1, T2]

**NAVER Webtoon** South Korea  
*Intern, Generative Model Team* Aug 2022 – Feb 2023

- Worked on generative models for visual content creation
- Collaborated with multiple researchers on style transfer and diffusion models [C6, C7]

## Publications

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\*: equal contribution    **C**: Conference    **W**: Workshop    **J**: Journal    **P**: Preprint    **T**: Technical report

**[T2] HyperCLOVA X 32B Think**  
NAVER Cloud HyperCLOVA X Team  
[arXiv:2601.03286](#)

**[T1] HyperCLOVA X 8B Omni**  
NAVER Cloud HyperCLOVA X Team  
[arXiv:2601.01792](#)

**[C8] Directional Textual Inversion for Personalized Text-to-Image Generation**  
[Kunhee Kim\\*](#), NaHyeon Park\*, Kibeom Hong, Hyunjung Shim  
ICLR 2026, [arXiv:2512.13672](#)

**[W2] Aligned but Stereotypical? The Hidden Influence of System Prompts on Social Bias in LVLMM-Based Text-to-Image Models**  
NaHyeon Park\*, Na Min An\*, [Kunhee Kim\\*](#), Soyeon Yoon, Jiahao Huo, Hyunjung Shim  
ICLR 2026 Workshop on AI with Recursive Self-Improvement, [arXiv:2512.04981](#)

**[J2] Boosting Text Encoder for Personalized Text-to-Image Generation**  
NaHyeon Park\*, [Kunhee Kim\\*](#), Hyunjung Shim  
TMLR 2026, [openreview](#)

**[P2] Rethinking the Use of Vision Transformers for AI-Generated Image Detection**  
NaHyeon Park, [Kunhee Kim](#), Junseok Choe, Hyunjung Shim  
[arXiv:2512.04969](#)

**[C7] DreamStyler: Paint by Style Inversion with Text-to-Image Diffusion Models**  
Namhyuk Ahn, Junsoo Lee, Chunggi Lee, [Kunhee Kim](#), Daesik Kim, Seung-Hun Nam, Kibeom Hong  
AAAI 2024, [arXiv:2309.06933](#)

**[W1] TADA: Timestep-Aware Data Augmentation for Diffusion Models**

NaHyeon Park\*, Kunhee Kim\*, Song Park, Jung-Woo Ha, Hyunjung Shim

NeurIPS 2023 Workshop on Diffusion Models

**[C6] AesPA-net: Aesthetic Pattern-Aware Style Transfer Networks**

Kibeom Hong, Seogkyu Jeon, Junsoo Lee, Namhyuk Ahn, Kunhee Kim, Pilhyeon Lee, Daesik Kim, Youngjung Uh, Hyeran Byun

ICCV 2023, [arXiv:2307.09724](https://arxiv.org/abs/2307.09724)

**[C5] Revisiting Image Pyramid Structure for High-Resolution Salient Object Detection**

Taehun Kim, Kunhee Kim, Joonyeong Lee, Dongmin Cha, Jiho Lee, Daijin Kim

ACCV 2022, [arXiv:2209.09475](https://arxiv.org/abs/2209.09475)

**[C4] A Style-Aware Discriminator for Controllable Image Translation**

Kunhee Kim, Sanghun Park, Eunyeong Jeon, Taehun Kim, Daijin Kim

CVPR 2022, [arXiv:2203.15375](https://arxiv.org/abs/2203.15375)

**[C3] Improving Style Randomization via Domain-Specific Feature Reweighting for Domain Generalization**

Jiho Lee, Kunhee Kim, Taehun Kim, Daijin Kim

EUSIPCO 2022

**[C2] FA-GAN: Feature-Aware GAN for Text-to-Image Synthesis**

Eunyeong Jeon, Kunhee Kim, Daijin Kim

ICIP 2021

**[C1] Localization Uncertainty-Based Attention for Object Detection**

Sanghun Park, Kunhee Kim, Eunseop Lee, Daijin Kim

ICIP 2021

**[J1] Dense Depth Estimation from Multiple 360-Degree Images Using Virtual Depth**

Seongyeop Yang, Kunhee Kim, Yeejin Lee

Applied Intelligence 2022

**Technical Skills**

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**Language & frameworks:** Python, PyTorch, Diffusers

**Tools:** Docker, Git, Linux/Unix, LaTeX

**Teaching Experience**

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**Computational Image Generation and Manipulation, KAIST**

*Fall 2025*

**Deep Reinforcement Learning, KAIST**

*Spring 2023*

**Data Structure, POSTECH**

*Spring 2021*

**Honors & Awards**

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**Excellence Award, Interdisciplinary Capstone Design Project, SeoulTech**

*2019*

**2nd Prize, Graduation Project Competition, SeoulTech**

*2019*

**Academic Service**

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**Conference Reviewer:** NeurIPS (2026), CVPR (2022–2026), ICCV (2023, 2025), ECCV (2022–2024), AAAI (2025, 2026), ACCV (2022), 3DV (2026)

**Journal Reviewer:** IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)