# Kunhee Kim

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## Education

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

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

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

## Work Experience

**NAVER Cloud** *South Korea*
*Resident* (Contract), 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 [C5, C6]

## Publications

*: 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 LVLM-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

**[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

**[C4] A Style-Aware Discriminator for Controllable Image Translation**
Kunhee Kim, Sanghun Park, Eunyeong Jeon, Taehun Kim, Daijin Kim
**CVPR 2022**, arXiv: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

**Language & frameworks:** Python, PyTorch, Diffusers
**Tools:** Docker, Git, Linux/Unix, LaTeX

## Academic Service

**Conference Reviewer:** NeurIPS (2026; **Top Reviewer**), ICLR (2027), 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)