

Jaemin Kim

🏠 [kjm981995.github.io](https://github.com/kjm981995) [🌐 LinkedIn](#) [✉️ kjm981995@kaist.ac.kr](mailto:kjm981995@kaist.ac.kr) / kjm981995@gmail.com

RESEARCH INTEREST

Aiming to improve the controllability of advance generative models, including diffusion models and Large Language Models (LLMs). Recently contributed to this goal by exploring efficient guidance methods, such as training-free approaches and general-purpose strategies.

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST) <i>Ph.D. in Artificial Intelligence</i>	Mar 2025 - Now <i>Advisor: Prof. Jong Chul Ye</i>
Korea Advanced Institute of Science and Technology (KAIST) <i>M.S. in Artificial Intelligence</i>	Mar 2023 - Feb 2025 <i>Advisor: Prof. Jong Chul Ye</i>
Korea Advanced Institute of Science and Technology (KAIST) <i>B.S. in Bio and Brain Engineering, Electrical Engineering (Double Major)</i>	Mar 2016 - Feb 2023 <i>GPA: 3.96/4.3 (Magna Cum Laude)</i>
Karlsruhe Institute of Technology (KIT) <i>Electrical Engineering and Information Technology (Exchange Student)</i>	Sep 2019 - Feb 2020 <i>Karlsruhe, Germany</i>

PUBLICATIONS *: Equal Contribution

[P3] <u>Training-Free Reward-Guided Image Editing via Trajectory Optimal Control</u> Jinho Chang*, Jaemin Kim* , Jong Chul Ye	<i>Preprint 2025</i>
[C4] <u>Free²Guide: Gradient-Free Path Integral Control for Enhancing Text-to-Video Generation with Large Vision-Language Models</u> Jaemin Kim , Bryan S Kim, Jong Chul Ye	<i>ICCV 2025</i>
[P2] <u>Universal Reasoner: A Single, Composable Plug-and-Play Reasoner for Frozen LLMs</u> Jaemin Kim* , Hangeol Chang*, Hyunmin Hwang*, Choonghan Kim, Jong Chul Ye	<i>Preprint 2025</i>
[C3] <u>Optical-Flow Guided Prompt Optimization for Coherent Video Generation</u> Hyelin Nam*, Jaemin Kim* , Dohun Lee, Jong Chul Ye	<i>CVPR 2025</i>
[C2] <u>Derivative-Free Diffusion Manifold-Constrained Gradient for Unified XAI</u> Won Jun Kim*, Hyungjin Chung*, Jaemin Kim* , Sangmin Lee, Byeongsu Sim, Jong Chul Ye	<i>CVPR 2025</i>
[C1] <u>Generalized Consistency Trajectory Models for Image Manipulation</u> Beomsu Kim*, Jaemin Kim* , Jeongsol Kim, Jong Chul Ye	<i>ICLR 2025</i>
[P1] <u>HiCBridge: Resolution Enhancement of Hi-C Data Using Direct Diffusion Bridge</u> Jaemin Kim* , Jong Chul Ye	<i>Preprint 2024</i>

HONORS AND AWARDS

Dongwon-KAIST scholarship <i>Full scholarship for tuition and stipend</i>	Mar 2023 - Feb 2025
National Science & Technology Scholarship <i>Scholarship for attracting outstanding talents</i>	Mar 2018 - Mar 2020

ACADEMIC ACTIVITIES

Persident, Student Council

May 2025 - Now

KAIST AI

Teaching Assistant

Mar 2025 - Jun 2025

KAIST - AI618: Generative Models and Unsupervised Learning

REFERENCES

Jong Chul Ye

M.S., Ph.D. Advisor

jong.ye@kaist.ac.kr

Endowed Chair Professor, Kim Jaechul Graduate School of Artificial Intelligence, KAIST