

Yonghyun Park

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Education

MS	Seoul National University , Science Education (Physics Major)	Sep. 2022 to Aug. 2024
BS	Seoul National University , Physics Education	Mar. 2016 to Aug. 2022
	<ul style="list-style-type: none"> Includes a 1.5 year mandatory military service in South Korea. GPA: 3.62/4.3 Coursework: Mechanics and Education, Electromagnetism and Education, Quantum Physics and Education, Statistical Physics and Education, Mathematical Physics and Education, Linear Algebra. 	

Publications and Preprints

Publications

Direct Unlearning Optimization for Robust and Safe Text-to-Image Models	Aug. 2024
Yong-Hyun Park , Sangdoo Yun, Jin-Hwa Kim, Junho Kim, Geonhui Jang, Yonghyun Jeong, Junghyo Jo [†] , Gayoung Lee [†] <i>In Thirty-eighth Conference on Neural Information Processing Systems (NeurIPS2024)</i> Paper link	
Understanding the Latent Space of Diffusion Models through the Lens of Riemannian Geometry	Aug. 2023
Yong-Hyun Park [*] , Mingi Kwon [*] , Jaewoong Choi, Junghyo Jo [†] , Youngjung Uh [†] <i>In Thirty-seventh Conference on Neural Information Processing Systems (NeurIPS2023)</i> Paper link	
Geometric Remove-and-Retrain (GOAR): Coordinate-Invariant eXplainable AI Assessment	Aug. 2023
Yong-Hyun Park , Junghoon Seo, Bomseok Park, Seongsu Lee, Junghyo Jo <i>XAI in Action: Past, Present, and Future Applications (NeurIPS2023 XAIA workshop)</i> Paper link	

Preprints

Jump Your Steps: Optimizing Sampling Schedule of Discrete Diffusion Models	Sep. 2024
Yong-Hyun Park , Chieh-Hsin Lai, Satoshi Hayakawa, Yuhta Takida, Yuki Mitsufuji <i>Arxiv, Under review @ ICLR25, Scores: 8/8/5/5</i> Paper link	
Upsample Guidance: Scale Up Diffusion Models without Training	Jan. 2024
Juno Hwang, Yong-Hyun Park , Junghyo Jo <i>Arxiv, Under review</i> Paper link	

Experience

SONY AI 🔗 , Music Foundation Model (Deep Generative Model), Research Intern	Japan
<ul style="list-style-type: none"> Improving the sampling algorithm of discrete diffusion models. 	Sep. 2024 to Present
NAVER AI Lab 🔗 , Generation Research, Research Intern	South Korea
<ul style="list-style-type: none"> Enhancing the safety of text-to-image models through unlearning algorithms. 	Mar. 2024 to Aug. 2024

CCS Lab [🔗](#), Undergraduate Research Intern

- Developing Bayesian model (Hierarchical Gaussian Filter) for addiction behavior.

South Korea
Oct. 2020 to Aug. 2021

Invited Presentations

Unsupervised Discovery of Semantic Latent Directions in Diffusion Models

Feb. 2023

- KIAS Center for AI and Natural Sciences Winter Workshop

Fellowships & Awards

NeurIPS 2023 scholar award

2023

Professional Activities

Reviewer (ICLR25, AISTATS25)

2025

Reviewer (AISTATS24, NeurIPS24 - Top reviewer)

2024

Reviewer (AISTATS23)

2023

Computer skills

Programming Languages: Python, PyTorch, Diffusers, Transformers, R

Teaching Assistantship

Theory and Practice of Diffusion Generative Models ([KIAS CAC Summer School](#) [🔗](#))

Jun. 2024

Theory and Practice of Diffusion Generative Models ([KIAS CAC Summer School](#) [🔗](#))

Jul. 2023

Introduction to Machine Learning for AI Convergence Education (Seoul National University, M1868.000200)

Fall 2023

Big data analytics and education (Seoul National University, M3450.000800)

Fall 2022

Referees

Prof. Junghyo Jo (jojunghyo@snu.ac.kr [🔗](#))

- Associate Professor at Department of Physics Education, Seoul National University (South Korea)

Prof. Youngjung Uh (yj.uh@yonsei.ac.kr [🔗](#))

- Assistant professor at Artificial Intelligence grad school and Applied Information Engineering major, Yonsei University (South Korea).

Dr. Chieh-Hsin Lai (chieh-hsin.lai@sony.com [🔗](#))

- Research Scientist/Tech Leader at Sony AI's Music Foundation Model Team.
- Visiting Assistant Professor at Department of Applied Mathematics, National Yang Ming Chiao Tung University (Taiwan)