

Jaehyun Nam

✉ johnnam513@gmail.com ⚡ jaehyun513.github.io ⚡ Google Scholar ⚡ LinkedIn ⚡ GitHub

Education

KAIST Ph.D. in Artificial Intelligence ○ Advisor: Jinwoo Shin ↗	Sept. 2023 – Present Daejeon, KR
KAIST M.S. in Artificial Intelligence ○ Advisor: Jinwoo Shin ↗	Mar. 2022 – Aug. 2023 Daejeon, KR
Seoul National University B.S. in Industrial Engineering and Mathematical Sciences (minor) ○ Advisor: Jaewook Lee ↗	Mar. 2016 – Feb. 2022 Seoul, KR

Employment

Google Cloud AI Research Student Researcher ○ Advisor: Jinsung Yoon ↗	Mar. 2025 – Dec. 2025 Sunnyvale, CA, US
--	--

Research Interests

My research interests are centered on integrating large language models (LLMs) into a broad range of applications.

Keywords: LLM Agents, Tabular Learning, AI for Science

Publications

*: Equal Contribution

Preprints

[P2] MLE-STAR: Machine Learning Engineering Agent via Search and Targeted Refinement
Jaehyun Nam, Jinsung Yoon, Jiefeng Chen, Jinwoo Shin, Sercan Ö. Arik, Tomas Pfister

[P1] FontAdapter: Instant Font Adaptation in Visual Text Generation
Myungkyu Koo, Subim Kim, Sangkyung Kwak, **Jaehyun Nam**, Seojin Kim, Jinwoo Shin

Conferences

[C5] Optimized Feature Generation for Tabular Data via LLMs with Decision Tree Reasoning
Jaehyun Nam*, Kyuyoung Kim*, Seunghyuk Oh, Jihoon Tack, Jaehyung Kim, Jinwoo Shin
NeurIPS 2024

[C4] Tabular Transfer Learning via Prompting LLMs
Jaehyun Nam, Woomin Song, Seong Hyeon Park, Jihoon Tack, Sukmin Yun, Jaehyung Kim, Kyu Hwan Oh, Jinwoo Shin
COLM 2024

[C3] Data-Efficient Molecular Generation with Hierarchical Textual Inversion
Seojin Kim, **Jaehyun Nam**, Sihyun Yu, Younghoon Shin, Jinwoo Shin
ICML 2024

[C2] SuRe: Summarizing Retrievals using Answer Candidates for Open-domain QA of LLMs
Jaehyung Kim, **Jaehyun Nam**, Sangwoo Mo, Jongjin Park, Sang-Woo Lee, Minjoon Seo, Jung-Woo Ha, Jinwoo Shin
ICLR 2024

- [C1] STUNT: Few-shot Tabular Learning with Self-generated Tasks from Unlabeled Tables
Jaehyun Nam, Jihoon Tack, Kyungmin Lee, Hankook Lee, Jinwoo Shin
ICLR 2023, **Spotlight Presentation (280/4956=5.6%)**
Bronze Prize, Samsung Humantech Paper Awards
Grand Prize, KAIST-Samsung Electronics Industry-Academia Cooperation Paper Award

Journals

- [J1] Holistic Molecular Representation Learning via Multi-view Fragmentation
Jaehyun Nam*, Seojin Kim*, Junsu Kim, Hankook Lee, Sungsoo Ahn, Jinwoo Shin
TMLR 2024

Workshops

- [W1] An Efficient Tokenization for Molecular Language Models
Seojin Kim, **Jaehyun Nam**, Jinwoo Shin
NeurIPS Workshop on AI for New Drug Modalities 2024

Honors

Notable Reviewer , ICLR	Mar. 2025
Google Cloud Platform Credit Award , Goolge Cloud	Apr. 2024
Grand Prize , KAIST-Samsung Electronics Industry-Academia Cooperation Paper Award	Aug. 2023
Travel Award , ICLR	May. 2023
Recipient , Google Conference Scholarships (APAC)	May. 2023
Bronze Prize , Samsung Humantech Paper Awards	Feb. 2023
Special Prize , National Cryptography Contest	Oct. 2021
Recipient , Hanseong Scholarship for Gifted Students	Mar. 2014 - Feb. 2016

Invited Talks

MLE-STAR: Machine Learning Engineering Agent via Search and Targeted Refinement	June 2025
◦ Google Cloud AI Research (Sunnyvale, CA, US)	
Semi-supervised Tabular Classification via In-context Learning of Large Language Models	June 2023
◦ Samsung Advanced Institue of Technology (Suwon, KR)	
STUNT: Few-shot Tabular Learning with Self-generated Tasks from Unlabeled Tables	
◦ AI Expo Korea (Seoul, KR)	May 2023
◦ ICLR (Kigali, RW)	May 2023
◦ Samsung Electronics Co. Ltd. (Remote)	Mar. 2023
◦ MOGAM Institute of Biomedical Research (Remote)	Mar. 2023
Privacy-preserving Median Selection and Secure Aggregation in Federated Learning	
◦ Korean Mathematical Society Fall Meeting (Remote)	Oct. 2021

Academic Services

Conference Reviewer

- Conference on Neural Information Processing System (**NeurIPS**)
- International Conference on Machine Learning (**ICML**)
- International Conference on Learning Representations (**ICLR**)
- International Conference on Computer Vision (**ICCV**)
- International Conference on Artificial Intelligence and Statistics (**AISTATS**)
- Conference on Language Modeling (**COLM**)

Teaching Experience

Teaching Assistant, Recent Advances in Deep Learning (AI602), KAIST

Spring 2024, Spring 2025

Teaching Assistant, Bayesian Machine Learning (AI701), KAIST

Fall 2024

Reference

Jinwoo Shin, Professor at KAIST

- Contact: jinwoos@kaist.ac.kr

Jaehyung Kim, Assistant Professor at Yonsei University

- Contact: jaehyungk@yonsei.ac.kr

Jinsung Yoon, Research Scientist at Google Cloud AI Reserach

- Contact: jinsungyoon@google.com