Hyomin Kim

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Education

Ph.D. Feb.2025 - Present
The Kim Jaechul Graduate School of AI @ KAIST *Seoul, Korea*

M.S. Mar.2023 - Feb.2025
Graduate School of Artificial Intelligence @ POSTECH *Pohang, Korea*
- GPA: 3.74/4.3

B.S. Mar.2019 - Feb.2023
Computer Science & Engineering @ Chung-Ang University *Seoul, Korea*
- GPA: 4.15/4.5

PUBLICATIONS

- ***H. Kim**, S. Hwang, J. Lim, Y. Piao, Y. Oh, W. Kim, C. Park, S. Ahn, J. Jeon, 2026, **Progressive Multi-Agent Reasoning for Biological Perturbation Prediction**, arXiv preprint*
- *Y. Piao, **H. Kim**, S. Kim, Y. Oh, J. Jeon, S. Hwang, J. Lim, W. Kim, C. Park, S. Ahn 2026, **Learning Adaptive Perturbation-Conditioned Contexts for Robust Transcriptional Response Prediction**, arXiv preprint*
- *T. Kim, J. Shin, **H. Kim**, Y. Jung, J. Lee, W. Lee, I. Han, S. Ahn, 2026, **DNAChunker: Learnable Tokenization for DNA Language Models**, arXiv preprint*
- ***Hyomin Kim**, Yunhui Jang, and Sungsoo Ahn, 2025, **MT-Mol:Multi Agent System with Tool-based Reasoning for Molecular Optimization**, EMNLP Findings*
- ***Hyomin Kim**, Yunhui Jang, Jaeho Lee, and Sungsoo Ahn, 2024, **Hybrid Neural Representations for Spherical Data**, ICML*
- *Sungwoo Park, **Hyomin Kim**, Kyungjae Lee and Junseok Kwon, 2022, **Riemannian Neural SDE: Learning Stochastic Representations on Manifolds** , NeurIPS*

EXPERIENCE

HITS Oct. 2025 – Present
Research Intern @ HITS *Seoul, Korea*
- Research internship
- Implement large language models that discovers mechanism of action of cell perturbation.

Machine Learning Lab June. 2022 – Aug. 2022
Undergraduate Research Intern @ POSTECH *Pohang, Korea*
- Summer internship at Machine Learning Lab.
- Studied & done research project about geometric deep learning

Computer Vision & Machine Learning Lab Aug. 2020 – Dec. 2022
Undergraduate Research Intern @ Chung-Ang University *Seoul, Korea*
- Published paper accepted at NeurIPS 2022.
- Published paper accepted at ICLR Workshop 2022.
- Published paper accepted at MTAP 2022.

PeopleSpace Inc. Jan. 2021 – Feb. 2021
AI Project *Virtual*

- Implemented attention managing programming for Zoom class.
- Collect data of zoom class and trained model for multi-classification.
- Implemented Graphic User Interface for attention managing program.

SCHOLARSHIPS

- **Presidential Science Scholarship (2019 - 2023)**
  Through a highly competitive process, recipients are selected for the opportunities to study in Korea or abroad. The criteria include academic excellence and potential to contribute to the areas of science, engineering, or technologies.

HONORS

- Google Solution Challenge, TOP-10, People's Choice Award, Google Developers (July, 2022)
- X-CORPS Festival 2021, 2nd Prize, Ministry of Science and ICT, Korea(Nov. 2021)
- Chung-Ang University Engineering Festival 2021, 3rd Prize, (Nov. 2021)
- Chung-Ang University DaVinci Open Source SW-AI Deep Learning Hackathon, 4th Prize, (Aug. 2021)

ADDITIONAL ACTIVITIES

- Young Engineers Honor Society (YEHS) under the National Academy of Engineering of Korea (NAEK) (May.2020 - Present)

Language Skills

TOEFL iBT : 102
TOEIC Speaking : Level 7

Technical Skills

Languages : Python, C, C++, Java, Javascript
Machine Learning : PyTorch, Tensorflow, MATLAB, FastAI