

Myungkyu Koo

🏠 myungkyukoo.github.io | ✉ jameskoo0503@kaist.ac.kr | 🌐 myungkyukoo

Research Interests

My research focuses on robotics foundation models. From this perspective, I am especially interested in enhancing models' comprehensive world understanding by integrating diverse modalities across vision, language, and physical feedback. Building on this, I work toward hierarchical reasoning and action prediction over long-horizon context.

Education

Korea Advanced Institute of Science and Technology (KAIST)

Seoul, Korea

Ph.D. Student in Artificial Intelligence

Mar. 2024 - Present

Advisor: [Jinwoo Shin](#)

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

B.S. in Electrical Engineering (minor in Computer Science)

Mar. 2018 - Feb. 2024

Magna Cum Laude (GPA: 3.86/4.3)

Publications

Conferences (*: Equal Contribution, †: Equal Advising)

C3 [Modular Sensory Stream for Integrating Physical Feedback in Vision-Language-Action Models](#)

Jimin Lee, Huiwon Jang, [Myungkyu Koo](#), Jungwoo Park, Jinwoo Shin

The Conference on Robot Learning (CoRL), 2026.

C2 [Contrastive Representation Regularization for Vision-Language-Action Models](#)

Taeyoung Kim, Jimin Lee, [Myungkyu Koo](#), Dongyoung Kim, Kyungmin Lee, Changyeon Kim, Younggyo Seo†, Jinwoo Shin†

International Conference on Machine Learning (ICML), 2026.

C1 [HAMLET: Switch your Vision-Language-Action Model into a History-Aware Policy](#)

[Myungkyu Koo](#)*, Daewon Choi*, Taeyoung Kim, Kyungmin Lee, Changyeon Kim, Younggyo Seo†, Jinwoo Shin†

International Conference on Learning Representations (ICLR), 2026.

Technical Reports (*: Equal Contribution, §: Research Lead)

T1 [RLDX-1 Technical Report](#)

Dongyoung Kim*§, Huiwon Jang*§, [Myungkyu Koo](#)*, Suhyeok Jang*, Taeyoung Kim*, et al., Jinwoo Shin§

RLWRLD Technical Report, 2026.

Preprints

P1 [FontAdapter: Instant Font Adaptation in Visual Text Generation](#)

[Myungkyu Koo](#), Subin Kim, Sangkyung Kwak, Jaehyun Nam, Seojin Kim, Jinwoo Shin

Experience

Research Engineer

RLWRLD

Mar. 2026 - Present

- Conducting research and development on robotics foundation models.
- Served as a core contributor to the [RLDX-1 project](#).

Research Intern

Pion Corporation

Jul. 2023 - Dec. 2023

- Developed an image-to-video pipeline that generates 3D rotation video ads from single-view product images.

Undergraduate Research Intern

CILAB, KAIST

Mar. 2020 - Dec. 2020

- Participated in a research project on developing a monocular depth estimation model.

Honors and Awards

Recipient , Academic Excellence Award (Dean's List)	Jun. 2021
Recipient , National Science & Technology Scholarship	Mar. 2018 - Feb. 2024
Recipient , Hansung Scholarship for Gifted Students	Feb. 2016

References

Prof. Jinwoo Shin, Full Professor at KAIST
E-mail: jinwoos@kaist.ac.kr

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