

# Seoung Choi

M.S. Student, School of Computing, KAIST

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## EDUCATION

**Korea Advanced Institute of Science & Technology (KAIST), School of Computing**

*M.S. Student*

Sep. 2026 – Present

**Korea Advanced Institute of Science & Technology (KAIST), School of Computing**

*B.S. | GPA: 3.8 / 4.3*

Mar. 2021 – Feb. 2026

## RESEARCH INTERESTS

- **Video understanding & reasoning:** Agent systems for long-form and egocentric videos, including efficient video inference on edge devices.
- **Prompt & agent optimization:** Methods that improve the computational and data efficiency of prompt and agent optimization.
- **VLM post-training:** Post-training methods that improve multimodal understanding and reasoning in vision-language models.

## EXPERIENCE

**MLV Lab, KAIST**

*Intern*

Daejeon, Korea

Jun. 2025 – Present

- Conduct research in multimodal AI and vision-language models, advised by Prof. Hyunwoo J. Kim.

**Smoretalk**

*AI Engineer*

Korea

Dec. 2024 – Aug. 2025

- Participated in AI service development using image generation and editing technologies.

**Naviworks, DX Technology Team**

*Internship, AI Engineer*

Korea

Feb. 2024 – Aug. 2024

- Participated in the metaeyes digital twin platform project, developing product features for converting 2D data into 3D data.

## PUBLICATIONS

- [U1] Jinyoung Kim, **Seoung Choi**, Jinyoung Park, and Hyunwoo J. Kim. “PORTER: Learning to Route Multimodal LLMs via Behavior-Aware Coresets and Pareto Optimization.” NeurIPS, 2026 (under review).
- [C1] Seohyun Lee\*, **Seoung Choi**\*, Dohwan Ko\*, Jongha Kim, and Hyunwoo J. Kim. “VideoSearch-R1: Iterative Video Retrieval and Reasoning via Soft Query Refinement.” ECCV, 2026. (\*Equal contribution)
- [C2] Dohwan Ko, Jinyoung Park, **Seoung Choi**, Sanghyeok Lee, Seohyun Lee, and Hyunwoo J. Kim. “MoE-GRPO: Optimizing Mixture-of-Experts via Reinforcement Learning in Vision-Language Models.” CVPR, 2026.

*C: Conference; U: Under Review; P: Patent*

## PATENT

- [P1] Apparatus and method for generating standard objects based on satellite imagery. Korean Patent Application No. 10-2024-0117862, filed Aug. 30, 2024; Publication No. 10-2026-0031996, published Mar. 9, 2026.

## SKILLS

**Research** AI agents, video understanding, multimodal AI, vision-language models, retrieval and reasoning.

**Engineering** Python, PyTorch, Git, model training and evaluation, AI service prototyping.