

Minhyuk Seo

Contact Information

✉ Email: minhyukseo@yonsei.ac.kr
🏡 Web: <https://dbd05088.github.io/>

☎ Phone: +82 10-5368-6281
in LinkedIn: [linkedin.com/in/minhyuk-seo/](https://www.linkedin.com/in/minhyuk-seo/)

Research Interests

Efficient Learning, MultiModal Learning, Continual Learning, Collaborative Learning, and Embodied AI

Education

Yonsei University, Seoul, Korea
M.S. in Computer Science
Advisor: Prof. Jonghyun Choi
Mar 2023 - Aug 2024 (Early graduation)
GPA: 4.3/4.3 (4.0/4.0)

B.S. in Computer Science
Ranked **2nd** out of 92 students
2 years of absence due to obligatory military service (2018 - 2020)
Mar 2017 - Feb 2023
GPA: 4.16/4.3 (3.94/4.0)

Research Experience

KU Leuven, Belgium
Research Associate @ PSI Group
Advisor: Prof. Tinne Tuytelaars
Mar 2025 - Present

Seoul National University, Korea
Research Assistant @ Machine Perception and Reasoning Lab
Advisor: Prof. Jonghyun Choi
Sep 2024 - Feb 2025

LG AI Research, Korea
Research Scientist Intern @ Advanced Machine Learnig Lab
Mentor: Dr. Hankook Lee
Feb 2023 - Aug 2023

Publications (Conferences)

🎓 [Google Scholar](#) (* Indicates equal contribution)

HEFT: Multi-modal Personalized Federated Learning for Heterogeneous Clients
Minhyuk Seo*, Taeheon Kim*, Hankook Lee, Jonghyun Choi, Tinne Tuytelaars
CVPRW 2025 @ Multimodal Foundation Models Workshop

Budgeted Online Learning by Adaptive Layer Freezing and Frequency-based Sampling
Minhyuk Seo*, Hyunseo Koh*, Jonghyun Choi
ICLR 2025 (Spotlight)

Learning Equi-angular Representations for Online Continual Learning
Minhyuk Seo, Hyunseo Koh, Wonje Jeung, Minjae Lee, San Kim, Hankook Lee, Sungjun Cho, Sungik Choi, Hyunwoo Kim, Jonghyun Choi
CVPR 2024

Online Continual Learning for Interactive Instruction Following Agents
Byeonghwi Kim*, Minhyuk Seo*, Jonghyun Choi
ICLR 2024

Online Boundary-free Continual Learning by Scheduled Data Prior
Hyunseo Koh, Minhyuk Seo, Jihwan Bang, Hwanjun Song, Deokki Hong, Seulki Park, Jung-Woo Ha, Jonghyun Choi
ICLR 2023

Preprints

Not All Clients Are Equal: Personalized Federated Learning on Heterogeneous Multi-Modal Clients
Minhyuk Seo*, Taeheon Kim*, Hankook Lee, Jonghyun Choi, Tinne Tuytelaars
Under review, 2025

OASIS: Online Sample Selection for Continual Visual Instruction Tuning
Minjae Lee*, **Minhyuk Seo***, Tingyu Qu, Tinne Tuytelaars, Jonghyun Choi
Under review, 2025

Just Say the Name: Online Continual Learning with Category Names Only via Data Generation
Minhyuk Seo, Seongwon Cho, Minjae Lee, Diganta Misra, Hyeonbeom Choi, Seon Joo Kim, Jonghyun Choi
Under review, 2025

Awards	<ul style="list-style-type: none">• Travel Award, CVPR 2025• Travel Award, ICLR 2025• Silver Prize, Graduate School Outstanding Research Award, Yonsei University• 2nd Place Award, Continual Learning Challenge (CVPR 2024)• Bronze Prize, Outstanding Paper Awards, IPIU 2024• 1st Place Award, Visual Continual Learning Challenge (ICCV 2023)• Best Capstone Design Award, Dept. of Computer Science, Yonsei University• Minister of Science and ICT Award, HANIUM ICT competition• Multiple Honors & Scholarships from Yonsei University	June 2025 Apr 2025 July 2024 May 2024 Feb 2024 Oct 2023 Dec 2022 Feb 2019 2017 - 2023
Scholarships	<p>Kwanjeong Education Foundation Scholarship (Graduate Students) Mar 2023 - Aug 2024</p> <ul style="list-style-type: none">• Full tuition or living expenses during graduate years (\$4,500 / semester) <p>Yonsei Bachelor & Master Program Scholarship Mar 2023 - Aug 2024</p> <ul style="list-style-type: none">• One or two students are selected from each department each year• Full tuition during graduate studies (\$5,000 / semester) <p>Kwanjeong Educational Foundation Scholarship (B.S. Students) Mar 2021 - Feb 2023</p> <ul style="list-style-type: none">• Full tuition or living expenses during undergraduate years (\$4,000 / semester) <p>Sejong Human resources & Education Development Foundation July 2021 - Dec 2021</p> <ul style="list-style-type: none">• Living expenses (\$1,500)	
Teaching Experience	<p>Yonsei University, Seoul, Korea</p> <ul style="list-style-type: none">• TA of Software Comprehensive Design (Spring 2023)• TA of Software Comprehensive Design (Fall 2023) <p>Seoul National University, Seoul, Korea</p> <ul style="list-style-type: none">• TA of Random Variables and Random Processes (Spring 2024)	
Talks	<p>Princeton AI Lab, New Jersey, USA</p> <ul style="list-style-type: none">• Toward Efficient Training of MLLMs: Sample Selection and Adaptive Layer Freezing <p>Naver Labs, Seongnam, Korea</p> <ul style="list-style-type: none">• Recent Research on Continual Learning <p>Apple Research, Seattle, USA</p> <ul style="list-style-type: none">• Practical Setups and Methods for Continual Learning	July 2025 Sep 2024 Jun 2024
Academic Services	<p>Reviewer</p> <ul style="list-style-type: none">• CVPR (2024-2025), ICML (2024-2025), ICLR (2024-2025), AISTATS (2025), ICRA (2025), TPAMI (2024-2025), NeurIPS (2024-2025), ICCV (2025), ACL ARR (May 2025), WACV (2026), CoRL @ LLHomeRobots (2024) <p>Program committee member</p> <ul style="list-style-type: none">• Challenge chair at ICCV 2025 @ Continual Learning and Computer Vision Workshop	

Skills	Programming Languages <ul style="list-style-type: none"> • Python, C/C++, Java Tools <ul style="list-style-type: none"> • Deep Learning Frameworks (PyTorch, TensorFlow) • Python Scientific Computing Libraries (numpy, scipy, matplotlib, etc.) • Docker, Slurm Languages <ul style="list-style-type: none"> • Korean(native), English(fluent) 	
Military Service	Republic of Korea Army 20 th , Yangpyeong, Korea	Mar 2018 - Nov 2019
References		
	Seoul National University • Prof. Jonghyun Choi (Advisor) ✉	<i>Associate Professor</i>
	KU Leuven • Prof. Tinne Tuytelaars (Advisor) ✉	<i>Professor</i>
	Sungkyunkwan University • Prof. Hankook Lee (Collaborator & Mentor @ LG AI Research) ✉	<i>Assistant Professor</i>
	Yonsei University • Prof. Seon Joo Kim (Thesis Advisory Committee) ✉	<i>Professor</i>