

Minhyuk Seo

Research Interest: Efficient Learning, Multi-Modal Learning, Continual Learning, Federated Learning, and Embodied AI
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EDUCATION

MS in Computer Science, Yonsei University, Seoul, Korea Advisor: Jonghyun Choi GPA: 4.3 / 4.3	Mar 2023 — Aug 2024 (Early graduation)
BS in Computer Science, Yonsei University, Seoul, Korea 2 years of absence due to obligatory military service (2018 - 2020) GPA: 4.16 / 4.3 - Graduate ranking: 2 / 92	Mar 2017 — Feb 2023
Daejeon Dongsin Science High School, Daejeon, Korea	Mar 2014 — Feb 2017

RESEARCH

KU Leuven, Leuven, Belgium Research Associate • Supervisor: Tinne Tuytelaars	Mar 2025 — Present
Seoul National University, Seoul, Korea Research Associate @ SNU Machine Perception and Reasoning Lab • Supervisor: Jonghyun Choi	Sep 2024 — Feb 2025
LG AI Research, Seoul, Korea Research Intern @ Advanced Machine Learnig Lab • Mentor: Hankook Lee	Feb 2023 — Aug 2023
Yonsei University, Seoul, Yonsei University, Korea Undergraduate Research Intern @ Vision and Learning Lab • Supervisor: Jonghyun Choi	Feb 2022 — Jan 2023
Yonsei University, Seoul, Yonsei University, Korea Undergraduate Research Intern @ Mobile and Embedded System Lab • Supervisor: Hojung Cha	Feb 2021 — Jan 2022

PUBLICATIONS

- Minhyuk Seo***, Taeheon Kim*, Hankook Lee, Jonghyun Choi, Tinne Tuytelaars. HEFT: Multi-modal Personalized Federated Continual Learning for Heterogeneous Clients. **CVPRW 2025 @ MMFM3**.
- Minhyuk Seo***, Hyunseo Koh*, and Jonghyun Choi. [Budgeted Online Continual Learning by Adaptive Layer Freezing and Frequency-based Sampling](#). **ICLR 2025 (Spotlight)**.
- Minhyuk Seo**, Hyunseo Koh, Wonje Jeung, Minjae Lee, San Kim, Hankook Lee, Sungjun Cho, Sungik Choi, Hyunwoo Kim and Jonghyun Choi. [Learning Equi-angular Representations for Online Continual Learning](#). **CVPR 2024**.
- Byeonghwi Kim*, **Minhyuk Seo***, and Jonghyun Choi. [Online Continual Learning for Interactive Instruction Following Agents](#). **ICLR 2024**.
- Hyunseo Koh, **Minhyuk Seo**, Jihwan Bang, Hwanjun Song, Deokki Hong, Seulki Park, Jung-Woo Ha, and Jonghyun Choi. [Online Boundary-free Continual Learning by Scheduled Data Prior](#). **ICLR 2023**.

(* Indicates equal contribution)

PREPRINTS

1. **Minhyuk Seo***, Taeheon Kim*, Hankook Lee, Jonghyun Choi, Tinne Tuytelaars. [Not All Clients Are Equal: Personalized Federated Learning on Heterogeneous Multi-Modal Clients](#). *Under Review at NeurIPS 2025*.
2. Minjae Lee*, **Minhyuk Seo***, Tingyu Qu, Tinne Tuytelaars, Jonghyun Choi. [OASIS: Online Sample Selection for Continual Visual Instruction Tuning](#). *Under Review at ACL ARR 2025 May*.
3. **Minhyuk Seo**, Seongwon Cho, Minjae Lee, Diganta Misra, Hyeonbeom Choi, Seon Joo Kim, Jonghyun Choi. [Just Say the Name: Online Continual Learning with Category Names Only via Data Generation](#). *Under Review at TMLR*.

(* Indicates equal contribution)

AWARDS & HONORS

DEI Scholarship, CVPR 2025	May 2025
DEI Scholarship, ICLR 2025	March 2025
Outstanding Research Paper Award in Graduate School, Yonsei University	July 2024
2nd Place Award , CVPR 2024 Continual Learning Challenge	May 2024
Bronze Prize, IPIU 2024 Outstanding Paper Awards	Feb 2024
1st Place Award , ICCV 2023 Visual Continual Learning Challenge	Oct 2023
Best Capstone Design Award in Dept. of Computer Science, Yonsei University	Dec 2022
1st place in the HANIUM ICT competition, Minister of Science, ICT and Future Planning Award	Feb 2019
Multiple Honors & Scholarships from Yonsei University	2017 - 2023

SCHOLARSHIPS

2023	Kwanjeong Educational Foundation Scholarship for Graduate Student Full tuition and living expenses during undergraduate years - \$9,000 / semester	Mar 2023 — Aug 2024
2023	Yonsei Bachelor & Master Program Scholarship (Select two students from the department each year) Full tuition during undergraduate years - \$5,000 / semester	Mar 2023 — Aug 2024
2021	Kwanjeong Educational Foundation Scholarship for Bachelor's program Full tuition and living expenses during undergraduate years - \$9,000 / semester	Mar 2021 — Feb 2023
2021	Sejong Human resources and Lifelong Education Development Foundation Living expenses - \$1,500	Jul 2021 — Dec 2021

TALKS

Naver Labs , Seongnam, Republic of Korea	Sep 2024
• Recent Research on Continual Learning	
Apple Research , Seattle, USA	Jun 2024
• Practical Set-ups and Methods for Continual Learning	

ACADEMIC SERVICE

Reviewer
• CVPR (2024-2025), ICML (2024-2025), ICLR (2024-2025), AISTATS (2025), ICRA (2025), TPAMI (2024-2025), NeurIPS (2024-2025), ICCV (2025), CoRL2024 @ LLHomeRobots
Program committee member
• Challenge chair at ICCV 2025 @ Continual Learning and Computer Vision (CLVISION) Workshop

TEACHING EXPERIENCE

Yonsei University , Seoul, Korea
• TA of Software Comprehensive Design (Spring 2023)
• TA of Software Comprehensive Design (Fall 2023)

- Seoul National University, Seoul, Korea
- TA of Random Variables and Random Processes (Spring 2024)

TECHNICAL SKILLS

Advanced	Python, Java	3 years
Intermediate	C++, R	1 year
Basic	MATLAB, HTML, CSS, JS	6 months
Frameworks	PyTorch	2 years

MILITARY SERVICE

Repulic of Korea Army 20 th , Yangpyeong, Korea	Mar 2018 - Nov 2019
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