Minhyuk Seo

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

MS in Computer Science, Yonsei University, Seoul, Korea — Mar 2023 — Aug 2024 (Early graduation)
Advisor: Jonghyun Choi
GPA: 4.3 / 4.3

BS in Computer Science, Yonsei University, Seoul, Korea — Mar 2017 — Feb 2023
2 years of absence due to obligatory military service (2018 - 2020)
GPA: 4.16 / 4.3 - Graduate ranking: 2 / 92 (2%)

Daejeon Dongsin Science High School, Dajeon, Korea — Mar 2014 — Feb 2017

Research

KU Leuven, Leuven, Belgium — Fed 2025 (Expected) — Aug 2025 (Expected)
Visiting Researcher

- Supervisor: Tinne Tuytelaars

Seoul National University, Seoul, Korea — Sep 2024 — Jan 2025 (Expected)
Researcher @ SNU Machine Perception and Reasoning Lab

- Supervisor: Jonghyun Choi

LG AI Research, Seoul, Korea — Feb 2023 — Aug 2023
Research Intern @ Advanced Machine Learnig Lab

- Mentor: Hankook Lee

Yonsei University, Seoul, Yonsei University, Korea — Feb 2022 — Jan 2023
Research Undergraduate Intern @ Vision and Learning Lab

- Supervisor: Jonghyun Choi

Yonsei University, Seoul, Yonsei University, Korea — Feb 2021 — Jan 2022
Research Undergraduate Intern @ Mobile and Embedded System Lab

- Supervisor: Hojung Cha

Publications

1. **Minhyuk Seo***, Hyunseo Koh*, and Jonghyun Choi. Budgeted Online Continual Learning by Adaptive Layer Freezing and Frequency-based Sampling. **arXiv** *(Under Review).*
2. **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. **arXiv** *(Under Review).*
3. **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**.
4. Byeonghwi Kim*, **Minhyuk Seo***, and Jonghyun Choi. Online Continual Learning for Interactive Instruction Following Agents. **ICLR 2024**.
5. 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)

Awards & Honors

Outstanding Research Paper Award in Graduate School, Yonsei University	July 2024
2nd Place Award, CVPR 2024 Workshop on Continual Learning in Computer Vision	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** — Mar 2023 — Aug 2024
Full tuition and living expenses during undergraduate years - $9,000 / semester

2023 **Yonsei Bachelor & Master Program Scholarship** (Select two students from the department each year) — Mar 2023 — Aug 2024
Full tuition during undergraduate years - $5,000 / semester

2021 **Kwanjeong Educational Foundation Scholarship for Bachelor's program** — Mar 2021 — Feb 2023
Full tuition and living expenses during undergraduate years - $9,000 / semester

2021 **Sejong Human resources and Lifelong Education Development Foundation** — Jul 2021 — Dec 2021
Living expenses - $1,500

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

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

Academic Service

Reviewers of
- CVPR (2024-2025), ICLR (2024-2025), AISTATS (2025), ICRA (2025), TPAMI (2024), NeurIPS (2024), NeurIPS Benchmark Track (2024), CoRL @ LLHomeRobots2024

Military Service

Repulic of Korea Army 20^{th}, Yangpyeong, Korea — Mar 2018 - Nov 2019