

# 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 Personalization

## Education

**Yonsei University**, Seoul, Korea

**M.S.** in Computer Science

Mar 2023 - Aug 2024 (Early graduation)

Advisor: **Prof. Jonghyun Choi**

GPA: 4.3/4.3 (4.0/4.0)

**B.S.** in Computer Science

Mar 2017 - Feb 2023

Ranked **2nd** out of 92 students

GPA: 4.16/4.3 (3.94/4.0)

2 years of absence due to obligatory military service (2018 - 2020)

## Research Experience

**KU Leuven**, Belgium

Mar 2025 - Present

Research Associate @ PSI Group

Advisor: **Prof. Tinne Tuytelaars**

**Seoul National University**, Korea

Sep 2024 - Feb 2025

Research Assistant @ Machine Perception and Reasoning Lab

Advisor: **Prof. Jonghyun Choi**

**LG AI Research**, Korea

Feb 2023 - Aug 2023

Research Scientist Intern @ Advanced Machine Learning Lab

Mentor: **Dr. Hankook Lee**

**Yonsei University**, Korea

Undergraduate Researcher @ Vision and Learning Lab

Feb 2022 - Jan 2023

Advisor: **Prof. Jonghyun Choi**

Undergraduate Researcher @ Mobile and Embedded System Lab

Feb 2021 - Jan 2022

Advisor: **Prof. Hojung Cha**

## Preprints

🎓 **Google Scholar** (\* Indicates equal contribution)

Not All Clients Are Equal: Collaborative Model Personalization 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*

## Publications

GenOL: Generating Diverse Examples for Name Only Online Learning

**Minhyuk Seo**, Seongwon Cho, Minjae Lee, Diganta Misra, Hyeonbeom Choi, Seon Joo Kim, Jonghyun Choi

**TMLR 2025**

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

## Awards

Travel Award, CVPR 2025	June 2025
Travel Award, ICLR 2025	Apr 2025
Silver Prize, Graduate School Outstanding Research Award, Yonsei University	July 2024
2nd Place Award, Continual Learning Challenge (CVPR 2024)	May 2024
Bronze Prize, Outstanding Paper Awards, IPIU 2024	Feb 2024
1st Place Award, Visual Continual Learning Challenge (ICCV 2023)	Oct 2023
Best Capstone Design Award, Dept. of Computer Science, Yonsei University	Dec 2022
Minister of Science and ICT Award, HANUM ICT competition	Feb 2019
Multiple Honors & Scholarships from Yonsei University	2017 - 2023

## Scholarships

<b>Kwanjeong Education Foundation Scholarship (Graduate Students)</b>	Mar 2023 - Aug 2024
• Full tuition or living expenses during graduate years (\$4,500 / semester)	
<b>Yonsei Bachelor &amp; Master Program Scholarship</b>	Mar 2023 - Aug 2024
• One or two students are selected from each department each year	
• Full tuition during graduate studies (\$5,000 / semester)	
<b>Kwanjeong Educational Foundation Scholarship (B.S. Students)</b>	Mar 2021 - Feb 2023
• Full tuition or living expenses during undergraduate years (\$4,000 / semester)	
<b>Sejong Human resources &amp; Education Development Foundation</b>	July 2021 - Dec 2021
• Living expenses (\$1,500)	

## Teaching Experience

<b>Yonsei University</b> , Seoul, Korea
• TA of Software Comprehensive Design (Spring 2023)
• TA of Software Comprehensive Design (Fall 2023)
<b>Seoul National University</b> , Seoul, Korea
• TA of Random Variables and Random Processes (Spring 2024)

## Talks

<b>Princeton Visual AI Lab</b> , New Jersey, USA	July 2025
• Toward Efficient Training of MLLMs: Sample Selection and Adaptive Layer Freezing	
<b>Naver Labs</b> , Seongnam, Korea	Sep 2024
• Recent Research on Continual Learning	
<b>Apple Research</b> , Seattle, USA	Jun 2024
• Practical Setups and Methods for Continual Learning	

Academic Services	<b>Reviewer</b> <ul style="list-style-type: none"><li>CVPR (2024-2026), ICML (2024-2025), ICLR (2024-2026), AISTATS (2025-2026), ICRA (2025), TPAMI (2024-2025), NeurIPS (2024-2025), ICCV (2025), ACL ARR (May 2025), WACV (2026), AAAI (2026), CoRL @ LLHomeRobots (2024)</li></ul>	
	<b>Program committee member</b> <ul style="list-style-type: none"><li>Challenge chair at <a href="#">ICCV 2025 @ Continual Learning and Computer Vision Workshop</a></li></ul>	
US Patents	<a href="#">Method and apparatus with neural network model training</a> <b>Minhyuk Seo</b> , Hyunseo Koh, Jonghyun Choi <i>US 20250094809A1</i>	Mar 2025
Skills	Programming Languages <ul style="list-style-type: none"><li>Python, C/C++, Java</li></ul>	
	Tools <ul style="list-style-type: none"><li>Deep Learning Frameworks (PyTorch, TensorFlow)</li><li>Python Scientific Computing Libraries (numpy, scipy, matplotlib, etc.)</li><li>Docker, Slurm</li></ul> Languages <ul style="list-style-type: none"><li>Korean(native), English(fluent)</li></ul>	
Military Service	Repulic of Korea Army 20 <sup>th</sup> , Yangpyeong, Korea	Mar 2018 - Nov 2019
References	Seoul National University <ul style="list-style-type: none"><li><a href="#">Prof. Jonghyun Choi</a> (Advisor) <a href="#">✉</a></li></ul>	<i>Associate Professor</i>
	KU Leuven <ul style="list-style-type: none"><li><a href="#">Prof. Tinne Tuytelaars</a> (Advisor) <a href="#">✉</a></li></ul>	<i>Professor</i>
	Sungkyunkwan University <ul style="list-style-type: none"><li><a href="#">Prof. Hankook Lee</a> (Collaborator &amp; Mentor @ LG AI Research) <a href="#">✉</a></li></ul>	<i>Assistant Professor</i>
	Yonsei University <ul style="list-style-type: none"><li><a href="#">Prof. Seon Joo Kim</a> (Thesis Advisory Committee) <a href="#">✉</a></li></ul>	<i>Professor</i>