

# Minhyuk Seo

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<b>Contact Information</b>	<b>✉ Email:</b> minhyukseo@yonsei.ac.kr <b>🏡 Web:</b> <a href="https://dbd05088.github.io/">https://dbd05088.github.io/</a>	<b>☎ Phone:</b> +82 10-5368-6281 <b>in LinkedIn:</b> <a href="https://www.linkedin.com/in/minhyuk-seo/">linkedin.com/in/minhyuk-seo/</a>
<b>Research Interests</b>	Efficient Learning, Online Learning, Continual Learning, Collaborative Learning, Multimodal Learning, and Personalization	
<b>Education</b>	<b>Yonsei University</b> , Seoul, Korea M.S. in Computer Science Advisor: <b>Prof. Jonghyun Choi</b> <b>B.S.</b> in Computer Science Ranked <b>2nd</b> out of 92 students 2 years of absence due to obligatory military service (2018 - 2019)	Mar 2023 - Aug 2024 (Early graduation) GPA: 4.3/4.3 (4.0/4.0) Mar 2017 - Feb 2023 GPA: 4.16/4.3 (3.94/4.0)
<b>Research Experience</b>	<b>KU Leuven</b> , Belgium Research Associate @ PSI Group Advisor: <b>Prof. Tinne Tuytelaars</b> <b>Seoul National University</b> , Korea Research Assistant @ Machine Perception and Reasoning Lab Advisor: <b>Prof. Jonghyun Choi</b> <b>LG AI Research</b> , Korea Research Intern @ Advanced Machine Learning Lab Mentor: <b>Dr. Hankook Lee</b> <b>Yonsei University</b> , Korea Undergraduate Researcher @ Vision and Learning Lab Advisor: <b>Prof. Jonghyun Choi</b> Undergraduate Researcher @ Mobile and Embedded System Lab Advisor: <b>Prof. Hojung Cha</b>	Mar 2025 - Present Sep 2024 - Feb 2025 Feb 2023 - Aug 2023 Feb 2022 - Jan 2023 Feb 2021 - Jan 2022
<b>Preprints</b>	<b>🎓 Google Scholar</b> (* Indicates equal contribution)	
	<b>OASIS: Online Sample Selection for Continual Visual Instruction Tuning</b> Minjae Lee*, <b>Minhyuk Seo</b> *, Tingyu Qu, Tinne Tuytelaars, Jonghyun Choi <i>ACL ARR under review (arXiv 2025.10)</i>	
	<b>Risk-adaptive Activation Steering for Safe Multimodal Large Language Models</b> Jonghyun Park, <b>Minhyuk Seo</b> , Jonghyun Choi <i>CVPR 2026 under review (arXiv 2025.10)</i>	
<b>Publications</b>	Not All Clients Are Equal: Collaborative Model Personalization on Heterogeneous Multi-Modal Clients <b>Minhyuk Seo</b> *, Taeheon Kim*, Hankook Lee, Jonghyun Choi, Tinne Tuytelaars <b>ICLR 2026</b>	
	GenOL: Generating Diverse Examples for Name Only Online Learning <b>Minhyuk Seo</b> , Seongwon Cho, Minjae Lee, Diganta Misra, Hyeonbeom Choi, Seon Joo Kim, Jonghyun Choi <b>TMLR 2025</b>	

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 Continual 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**

<b>Awards</b>	Travel Grant, CVPR 2025	June 2025
	Travel Grant, 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, HANIUM ICT competition	Feb 2019
	Multiple Honors & Scholarships from Yonsei University	2017 - 2023

<b>Scholarships</b>	<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)	

<b>Teaching Experience</b>	<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)	

<b>Talks</b>	<b>Agentic Learning AI Lab @ NYU</b> , Virtual	Dec 2025
	• Human-like AI	
	<b>Princeton Visual AI Lab @ Princeton University</b> , Virtual	July 2025
	• Toward Efficient Training of MLLMs	
	<b>Naver Labs</b> , Seongnam, Korea	Sep 2024

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