Whie Jung

PhD Student · School of Computing

KAIST, 291 Daehak-ro, Yuseong-gu, Daejeon, South Korea

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Research Interest

Machine learning, deep learning:

AI Agents, Object-centric learning, Disentangled representation learning, Compositional representation learning.

Education

KAIST *Daejeon, Korea*

Ph.D. student, School of Computing *2020 - 2026.08 (expected)*

- Advisor: Seunghoon Hong

KAIST *Daejeon, Korea*

M.S., Graduate School of Culture Technology *2017 - 2019*

- Advisor: Woontack Woo

KAIST *Daejeon, Korea*

B.S., Electrical Engineering *2013 - 2017*

Korea Science Academy *Busan, Korea*

High School *2010 - 2013*

Publications

Whie Jung, Semin Kim, Junee Kim, and Seunghoon Hong. "Bridging the gap to real-world language-grounded visual concept learning", Advances in Neural Information Processing Systems (NeurIPS), 2025.

Whie Jung, Dong Hoon Lee, and Seunghoon Hong. "Disentangled Representation Learning via Modular Compositional Bias", Advances in Neural Information Processing Systems (NeurIPS), 2025.

Whie Jung, Jaehoon Yoo, Sungjin Ahn, and Seunghoon Hong. "Learning to Compose: Improving Object Centric Learning by Injecting Compositionality", International Conference on Learning Representations (ICLR), 2024.

Wonkwang Lee, **Whie Jung**, Han Zhang, Ting Chen, Jing Yu Koh, Thomas Huang, Hyungsuk Yoon, Honglak Lee, and Seunghoon Hong, "Revisiting hierarchical approach for persistent long-term video prediction", International Conference on Learning Representations (ICLR), 2021.

Whie Jung, Woojin Cho, Hayun Kim, Woontack Woo. "Boosthand: Distance-free object manipulation system with switchable non-linear mapping for augmented reality classrooms", IEEE International Symposium on Mixed and Augmented Reality (ISMAR-Adjunct), 2017.

Whie Jung, Woon Tack Woo. "Duplication based distance-free freehand virtual object manipulation", International Symposium on Ubiquitous Virtual Reality (ISUVR), 2017

Honors and Awards

2024 **NeurIPS 2024 Top Reviewer**, NeurIPS

2021 **Outstanding TA Award (CS576 Computer Vision)**, School of Computing, KAIST

2019 **Hyundai Motor Chung Mong-Koo Global Scholarship**, Chung Mong-Koo Foundation

2013-2016 **National Science and Technology Scholarship**, KAIST

Teaching Experience

Fall 2024	**Samsung AI Expert Program**, Teaching Assistant	*Samsung Electronics*
Summer 2022	**Samsung AI Expert Program**, Teaching Assistant	*Samsung Electronics*
Winter 2022	**Samsung AI Vision Class: Advanced Curriculum**, Teaching Assistant	*Samsung Electronics*
Spring 2022	**CS576 Computer Vision**, Teaching Assistant	*KAIST*
Fall 2021	**Counseling Assistant** , Teaching Assistant	*KAIST*
Spring 2021	**CS576 Computer Vision**, Teaching Assistant	*KAIST*
Fall 2020	**CS470 Introduction to Artificial Intelligence**, Teaching Assistant	*KAIST*
Summer 2020	**NPEX Course**, Teaching Assistant	*Samsung Electronics*
2015 - 2016	**Proctor**, Assistant for Freshmen	*KAIST*

Work Experience

Spring 2021	**Research Internship**, KAIST VL Lab
Winter 2016	**Company-University Cooperation (CUop) Internship**, COXEM
Fall 2015	**Undergraduate Research Internship**, TESLA Lab, KAIST
Winter 2015	**Winter Intership**, SK hynic Inc.

Academic Services

Conference Reviewer

2023 - Present	**ICLR 2024-2025, CVPR 2024, ICML 2025, ICCV 2025, NeurIPS 2024-2025**,

Technical Skills

Programming Languages: Python

Deep Learning Frameworks: PyTorch, TensorFlow