## Seonho Lee

Dual citizenship (Republic of Korea, USA) | glanceyes@kaist.ac.kr | glanceyes.github.io | linkedin (glanceyes)

## **Education**

#### KAIST, Graduate of Artificial Intelligence

Mar 2024 – Feb 2026

• Advisor: Prof. Hyunjung Shim

(expected)

- GPA: 4.18/4.3
- Research area: Generative Models, Open-Vocabulary Understanding

## Sogang University, BS in Computer Science and Engineering

Mar 2017 - Feb 2024

• GPA: 4.12/4.3 (2<sup>nd</sup> out of 120, **Summa Cum Laude**)

Sangsan High School

Mar 2014 - Feb 2017

#### **Publications**

# Fine-Grained Image-Text Correspondence with Cost Aggregation for Open-Vocabulary Part Segmentation

Jan 2025

Jiho Choi\*, <u>Seonho Lee</u>\*, Seungho Lee, Minhyun Lee, Hyunjung Shim (\* indicates equal contribution) **CVPR 2025**, arXiv:2501.09688

## Scribble-Guided Diffusion for Training-free Text-to-Image Generation

Sep 2024

<u>Seonho Lee</u>\*, Jiho Choi\*, Seohyun Lim, Jiwook Kim, Hyunjung Shim (\* indicates equal contribution)

Under Review, arXiv:2409.08026

## DreamCatalyst: Fast and High-Quality 3D Editing via Controlling Editability and Identity Preservation

Jul 2024

Jiwook Kim\*, <u>Seonho Lee</u>\*, Jaeyo Shin, Jiho Choi, Hyunjung Shim (\* indicates equal contribution) ICLR 2025, arXiv:2407.11394

## **Understanding Multi-Granularity for Open-Vocabulary Part Segmentation**

May 2024

Jiho Choi\*, <u>Seonho Lee</u>\*, Seungho Lee, Minhyun Lee, Hyunjung Shim (\* indicates equal contribution)

NeurIPS 2024, arXiv:2406.11384

## **Work Experience**

#### Generative ML Research Intern, Snap Inc.

Jun 2025 - Sep 2025

(expected)

Research on video diffusion model

#### Graduate Researcher, CVML Lab, KAIST

Mar 2024 - Feb 2026

- Researching multi-modal AI for real-world interactions, particularly in open-vocabulary settings
- Investigating generative AI for 3D content creation and editing

• Summer internship at Generative ML team, Santa Monica, CA

#### Research Intern, HVCL, Korea University

Jul 2022 – Aug 2022

- Developed web-based deep-learning software in analysis of pathology
- Contributed to a project in a start-up affiliated with the laboratory
- Advisor: Prof. Won Ki Jeong

## Data Engineer, Life Planning Lab

Dec 2021 - Jan 2022

- Developed back-end platform and managed database
- Created a data preprocessor on AWS and built data pipeline for dashboard

## **Projects**

## Research on 3D-aware VLM Finetuning, KAIST & Samsung Research

Jun 2024 - Jun 2025

• On-going research project for industry-university coorperation

## SHrack: Mobile Web Service for Real-time Exercise Count Tracking

Mar 2023 - Jun 2023

- Web-based real-time video streaming service for accurate exercise count detection
- Developed a pipeline for deep learning using MobileNet and Contextual Prediction Module

### RECJOON: Backjoon Online Judge Problem Solving Recommendation System

Mar 2022 - Jun 2022

- Recommendation system for Baekjoon Online Judge algorithm problems
- Led a project developing a web application and designed MLOps architectures

## **KUVIS (Vience Canvas)**

Jun 2022 - Aug 2022

- Developed a baseline of parallel computing for deep learning
- Designed an architecture of visual AI programming

#### **Honors and Awards**

## 2nd Place on Open-Vocabulary Part Segmentation Challenge at CVPR 2024

Jun 2024

- 2nd Place Winnder both on Track 1 and 2
- 4th workshop on Open World Vision at CVPR 2024

#### **Excellence Award in 2023 POSTECH OIBC Challenge**

Dec 2023

• 3rd Place (3/120) in AI Competition of Solar Power Generation Forecasting

#### 2022 ICPC Asia Korea Regional Contest

• 48<sup>th</sup> in Korea, 62<sup>nd</sup> in Preliminary

## Korea National Science and Technology Scholarship

Mar 2019 - Dec 2023

• Spring 2019, Fall 2022, Spring 2023, Fall 2023 (4 Semesters)

#### Dean's List, Sogang University

- 1%: Spring 2018, Spring 2019, Fall 2022
- 5%: Fall 2018

## **Teaching Experience**

## Basic Computational Engineering Design, CSE2003, Sogang University

Sep 2019 - Dec 2019

• Teaching Assistant

## Skill Development

## Naver Boostcamp AI Tech 3rd

Jan 2022 - Jun 2022

• Participated in courses and competitions hosted by Upstage