Seungeun Lee

AI Researcher, Future AI Team, KLleon

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RESEARCH INTEREST

Computer vision and deep learning, including
- 3D human modeling
  - Animatable 3D avatar generation
  - Human motion capture
  - Neural rigging and animation
- Geometric deep learning on sphere
  - Generative modeling on sphere
  - Spherical image registration
  - Spherical harmonic analysis

EDUCATION

M.S., Computer Science and Engineering, UNIST 2021–2023
Advisor: Prof. Ilwoo Lyu

B.S., Information & Communication Engineering, Inha University 2017-2021
Summa Cum Laude (rank: 3/89), GPA: 4.2/4.5, Total credit: 152

WORK EXPERIENCE

AI Researcher, Future AI Team, KLleon Nov. 2023–Present
Advisor: Prof. Gyeong-Moon Park

- Researched and developed models for dynamic appearance reconstruction and animation of full-body avatars wearing loose clothing such as skirts.
- Researched and developed models for audio-driven 3D talking avatar generation and animation, including facial expressions and gestures.

Research Intern, NAVER CLOVA Jul. 2022–Oct. 2022

- Developed a human motion capture model for a healthcare system providing posture correction services, which also works with sparse-view cameras.

PREPRINT

[P2] **Seungeun Lee**, Gyeong-Moon Park, "Distilling Video Diffusion Model to Animate Expressive 3D Humans from a Photo," *Preprint*, 2025.

[P1] **Seungeun Lee**, Gyeong-Moon Park, "Secondary Motion-aware 3D Gaussian Avatars for Modeling Dynamic Appearances," *Preprint*, 2025.

PUBLICATION

[C2] **Seungeun Lee**, Sergey Pyatkovskiy, Jaejun Yoo, Ilwoo Lyu, "Spherical Diffusion Process for Score-Guided Cortical Correspondence via Spectral Attention," *MICCAI*, 2025.

[J2] **Seungeun Lee**, Seunghwan Lee, Sunghwa Ryu, Ilwoo Lyu, "SPHARM-Reg: Unsupervised Cortical Surface Registration using Spherical Harmonics," *IEEE Transcation on Medical Imaging*, 2024.

[J1] **Seungeun Lee**, Seunghwan Lee, Ethan Willbrand, Benjamin Parker, Silvia Bunge, Kevin Weiner, Ilwoo Lyu, "Leveraging Input-Level Feature Deformation with Guided-Attention for Sulcal Labeling," *IEEE Transcation on Medical Imaging*, 2024.

[C1] **Seungeun Lee**, "Facial Texure Perceiver: Towards High-Fidelity Facial Texture Recovery with Input-Level Inductive Biased Perceiver IO," *ICASSP*, 2023.

HONOR & AWARD

2024. **3rd Place**, *2nd RHOBIN Challenge at CVPR 2024.*
Sponsor: Apple and Meshcapade
Task: 3D human contact estimation from single-view images.

2020. **1st Place**, *I-GPS: Inha Group for Problem Solving.*
Institute: Inha University
Task: Developed a technology that diagnoses users' depression by analyzing structured data collected from smartphone app sensors using machine learning algorithms.

SKILL

- *Main Language & Deep Learning Library*: Python and Pytorch
- *Libraries I'm Familiar with*: SMPL-X, Pytorch3D, Trimesh, OpenCV
- *3D Graphic Tool*: Blender

ACADEMIC ACTIVITY

Reviewer: CVPR (2025∼), MICCAI (2025∼)

TEACHING EXPERIENCE

Teaching Assistant: 3D Medical Image Processing and Analysis, UNIST, 2022.
Introduction to Deep Generative Models, LG Electronics, 2021.
Introduction to AI Programming, UNIST, 2021.