


# JoungBin Lee

Last update: March 2026

✉ [joungbinlee@kaist.ac.kr](mailto:joungbinlee@kaist.ac.kr)  Google Scholar

## Research Interests

---

My research focuses on **generative modeling for visual content creation**, with an emphasis on **controllable and geometry-aware generation**. I am particularly interested in diffusion-based image and video generation that preserves 3D structure, temporal consistency, and user-specified controls.

- Diffusion-based image and video generation with controllable attributes
- Geometry-aware and camera-controllable video synthesis using 3D/4D representations
- Generative modeling for data augmentation and downstream visual tasks

## Education

---

**M.S./Ph.D. Integrated Course in Artificial Intelligence** March 2025 – Present  
Korea Advanced Institute of Science and Technology (KAIST)

**B.S. in Data Science** March 2023 – February 2025  
Korea University  
GPA: 3.9 / 4.5

**B.S. in Artificial Intelligence** March 2021 – February 2023  
University of Seoul  
GPA: 4.2 / 4.5

## Publications

---

\* Equal Contribution, † Corresponding Author

### International Conference

[C5] **Attribute-Preserving Pseudo-Labeling for Diffusion-Based Face Swapping**

Jiwon Kang, Yeji Choi, **JoungBin Lee**, Wooseok Jang, Jinhyeok Choi, Taekun Kang, Yongjae Park, Myungin Kim, Seungryong Kim<sup>†</sup>  
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR 2026)

[Paper](#) | [Project Page](#) | [Code](#)

[C4] **3D Scene Prompting for Scene-Consistent Camera-Controllable Video Generation**

**JoungBin Lee**<sup>\*</sup>, Jaewoo Jung<sup>\*</sup>, Jisang Han<sup>\*</sup>, Takuya Narihira, Kazumi Fukuda, Junyoung Seo, Sunghwan Hong, Yuki Mitsufuji<sup>†</sup>, Seungryong Kim<sup>†</sup>  
International Conference on Learning Representations (ICLR 2026)

[Paper](#) | [Project Page](#) | [Code](#)

[C3] **CHIMERA: Controllable High-quality Image-Mask Extraction for Reliable Diffusion-Based Anomaly Synthesis**

**JoungBin Lee**<sup>\*</sup>, Hyunkoo Lee<sup>\*</sup>, Jini Yang<sup>\*</sup>, Chaehyun Kim, Jung Yi, Seok Hwangbo, Hyeoncheol Lee, Minho Chun, Eunjo Jeong, Seungryong Kim<sup>†</sup>  
AAAI Conference on Artificial Intelligence (AAAI 2026)

[Paper](#) | [Project Page](#) | [Code](#)

[C2] **Vid-CamEdit: Video Camera Trajectory Editing with Generative Rendering from Estimated Geometry**

Junyoung Seo<sup>\*</sup>, Jisang Han<sup>\*</sup>, Jaewoo Jung<sup>\*</sup>, Siyoon Jin, **JoungBin Lee**, Takuya Narihira, Kazumi Fukuda, Takashi Shibuya, Donghoon Ahn, Shoukang Hu, Seungryong Kim<sup>†</sup>, Yuki Mitsufuji<sup>†</sup>  
AAAI Conference on Artificial Intelligence (AAAI 2026)

[Paper](#) | [Project Page](#) | [Code](#)

**[C1] GaussianTalker: Real-Time High-Fidelity Talking Head Synthesis with Audio-Driven 3D Gaussian Splatting**

Kyusun Cho\*, JoungBin Lee\*, Heeji Yoon\*, Yeobin Hong, Jaehoon Ko, Sangjun Ahn, Seungryong Kim<sup>†</sup>  
ACM Multimedia (ACM MM 2024)

[Paper](#) | [Project Page](#) | [Code](#)

## Workshop & Findings

**[F1] Pose-diVE: Pose-Diversified Augmentation for Person Re-Identification**

Inès Hyeonsu Kim, Woojeong Jin, Soowon Son, Junyoung Seo, Seokju Cho, JeongYeol Baek, Byeongwon Lee, JoungBin Lee, Seungryong Kim<sup>†</sup>  
Findings on Computer Vision and Pattern Recognition 2026 (CVPR 2026 Findings)

[Paper](#) | [Project Page](#) | [Code](#)

**[W1] Talk3D: High-Fidelity Talking Portrait Synthesis via Personalized 3D Generative Prior**

Jaehon Ko, Kyusun Cho, JoungBin Lee, Heeji Yoon, Sangmin Lee, Sangjun Ahn, Seungryong Kim  
Workshop on Generative AI for Audio-Visual Content Creation (Gen4AVC), ICCVW 2025

[Paper](#) | [Project Page](#) | [Code](#)

## Preprint

**[P2] Grounding World Simulation Models in a Real-World Metropolis**

Junyoung Seo, Hyunwook Choi, Minkyung Kwon, Jinhyeok Choi, Siyoon Jin, Gayoung Lee, Junho Kim, JoungBin Lee, Geonmo Gu, Dongyoon Han, Sangdoon Yun, Seungryong Kim, Jin-Hwa Kim  
arXiv (2026)

[Paper](#) | [Project Page](#) | [Code](#)

**[P1] WorldCam: Interactive Autoregressive 3D Gaming Worlds with Camera Pose as a Unifying Geometric Representation**

Jisu Nam, Yicong Hong, Chun-Hao Paul Huang, Feng Liu, JoungBin Lee, Jiyoung Kim, Siyoon Jin, Yunsung Lee, Jaeyoon Jung, Suhwan Choi, Seungryong Kim, Yang Zhou  
arXiv (2026)

[Paper](#) | [Project Page](#) | [Code](#)

## Honors & Awards

---

- Excellence Award, Graduate School of Chemical Safety Management, University of Seoul (2021)
- Silver Award, iNTton Datathon, Korea University SW Convergence Foundation (2023)

## Leadership & Service

---

- Vice President, AI Department Student Council, University of Seoul (2021)
- Vice Representative, AI Department Student Council, University of Seoul (2021)