

Jihyun Lee

Ph.D. Candidate
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EDUCATION

- | | | |
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| Aug. 2020 ~ | KAIST
<i>Integrated Master's & Ph.D in Computer Science</i>
• Advisors: Tae-Kyun (T-K) Kim and Minhyuk Sung | Daejeon, South Korea |
| Mar. 2017 ~
Aug. 2020 | Handong Global University
<i>Bachelor of Science in Computer Science</i>
• Top Rank in Computer Science and Electrical Engineering Department (GPA: 4.45 / 4.5)
• Early Graduation | Pohang, South Korea |

RESEARCH EXPERIENCES

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| Jun. 2024 ~
Nov. 2024 | Meta (Codec Avatars Lab)
<i>Research Scientist Intern</i>
• Collaborators: Jason Saragih, Weipeng Xu, Alexander Richard, Shih-En Wei and Shunsuke Saito
• Developed a one-step diffusion model for real-time, high-fidelity human motion estimation from egocentric video inputs
• Resulting paper accepted at CVPR 2025 (top-tier conference in CV/ML) | Pittsburgh, United States |
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PUBLICATIONS

PREPRINT

- [P1] Y. Min*, D. Choi*, K. Yeo, **J. Lee**, M. Sung, “ORIGEN: Zero-Shot 3D Orientation Grounding in Text-to-Image Generation”, Preprint 2025 (* equal contributions)

INTERNATIONAL CONFERENCES

- [C1] T. Ohkawa, **J. Lee**, S. Saito, J. Saragih, F. Prada, Y. Xu, S. Yu, R. Furuta, Y. Sato, T. Shiratori, “Generative Modeling of Shape-Dependent Self-Contact Human Poses”, **ICCV 2025**, Hawaii, United States
- [C2] **J. Lee**, W. Xu, A. Richard, S. Wei, S. Saito, S. Bai, T. Wang, M. Sung, T-K. Kim, J. Saragih, “Egocentric Whole-Body Motion Diffusion with Exemplar-Based Identity Conditioning”, **CVPR 2025**, Nashville, United States
- [C3] W. Cho, **J. Lee**, M. Yi, M. Kim, T. Woo, D. Kim, T. Ha, H. Lee, J. Ryu, W. Woo, T-K. Kim, “Dense Hand-Object(HO) GraspNet with Full Grasping Taxonomy and Dynamics”, **ECCV 2024**, Milan, Italy
- [C4] **J. Lee**, S. Saito, G. Nam, M. Sung, T-K. Kim, “InterHandGen: Two-Hand Interaction Generation via Cascaded Reverse Diffusion”, **CVPR 2024**, Seattle, United States
- [C5] **J. Lee**, J. Jang, D. Kim, M. Sung, T-K. Kim, “FourierHandFlow: Neural 4D Hand Representation Using Fourier Query Flow”, **NeurIPS 2023**, New Orleans, United States

- [C6] **J. Lee**, M. Sung, H. Choi, T-K. Kim, “Im2Hands: Learning Attentive Implicit Representation of Interacting Two-Hand Shapes”, **CVPR 2023**, Vancouver, Canada
- [C7] H. Park*, **J. Lee***, Y. Seo, T. Min, J. Yun, J. Kim, T-K. Kim, “Contrastive Knowledge Distillation for Anomaly Detection in Multi-Illumination/Focus Display Images”, MVA 2023, Hamamatsu, Japan (* equal contributions) – **oral**
 - *Written as a report of an industrial research project with Samsung Display*
- [C8] **J. Lee***, M. Sung*, H. Kim, T-K. Kim, “Pop-Out Motion: 3D-Aware Image Deformation via Learning Shape Laplacian”, **CVPR 2022**, New Orleans, United States (* equal contributions)
- [C9] **J. Lee**, B. Bhattarai, T-K. Kim, “Face Parsing from RGB and Depth Using Cross-Domain Mutual Learning”, **CVPR Workshops 2021** (IEEE AMFG), virtual – **oral**, 27% acceptance rate
- [C10] M. Kang, **J. Lee**, S. Kim and I. Kim, “Fast DCTTS: Efficient Deep Convolutional Text-to-Speech”, **ICASSP 2021**, Toronto, Canada

DOMESTIC CONFERENCES (IN KOREAN)

- [C11] D. Kim, H. Kim, **J. Lee**, J. Park, H. Kim, “Elimination of Grid Lines in the Object Boundary Area of X-ray Images”, KCC 2019, Jeju, South Korea
- [C12] **J. Lee**, J. Park, J. Seo and H. Kim, “A Dynamically Segmented DCT Technique for Grid Artifact Suppression in X-ray Images”, KIPS 2018, Busan, South Korea
- [C13] J. Jung, J. Park, **J. Lee**, G. Jung and H. Kim, “A Blocking Effect Reduction Technique for the Grid Line Suppression Method using DCT”, KSC 2018, Pyeongchang, South Korea

DOMESTIC JOURNAL (IN KOREAN)

- [J1] H. Kim, J. Jung, **J. Lee**, J. Park, J. Seo, and H. Kim, “A Dynamically Segmented DCT Technique for Grid Artifact Suppression in X-ray Images”, KTSDE, 8(4), 171-178 (2019)

PATENT

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- [P1] M. Kang, S. Kim, S. Kim, **J. Lee**, and I. Kim, “Method for Lightweight Speech Synthesis of End-to-End DCTTS (Deep Convolutional Text-To-Speech System)”, KR Patent 10-2019-0

AWARDS & HONORS (SELECTED)

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- [A1] Outstanding Reviewer, ECCV, 2024
 - [A2] Outstanding TA Award, KAIST, 2022
 - [A3] Mayor’s Award (\$3,000) at Korea Software Convergence Hackathon, Ministry of Science and ICT of Korea, 2019
 - [A4] Honorable Mention Award at Undergraduate Student Paper Competition, KSC, 2019
 - [A5] Honorable Mention Award at Undergraduate Student Paper Competition, KCC, 2019
 - [A6] Silver Prize at Undergraduate Student Paper Competition, KIPS, 2018

ACADEMIC ACTIVITIES

Reviewer CVPR (2023-), ICCV (2025-), ECCV (2024-), NeurIPS (2024-), ICML (2025-), AAAI (2023-), IJCV (2025-), PG (2023-), Image and Vision Computing (2022-), CVPRW (2021-)

Student Organizer Google exploreCSR Workshops at KAIST (2022-2023)

TEACHING EXPERIENCES

Teaching Assistant Artificial Intelligence and Machine Learning (CS570), KAIST, 2021-2023

Machine Learning for Computer Vision (CS492), KAIST, 2021-2022

Operating System (ECE30021), Handong Global University, 2020

C++ Programming (ECE20018), Handong Global University, 2019

Data Structure (ECE20010), Handong Global University, 2018