

Jaewoo Jeong

jeong207@kaist.ac.kr • jaewoo97.github.io • (010) 6564 3078 • 291 Daehak-ro, N7-4 5123, Daejeon, Republic of Korea 34141

EDUCATION

23.03 – Present	Korea Advanced Institute of Science and Technology (KAIST) Doctoral Candidate, Mechanical Engineering Advisor: Prof. Kuk-Jin Yoon
21.03 – 23.02	Korea Advanced Institute of Science and Technology (KAIST) M.S., Mechanical Engineering (GPA 4.01 / 4.30) Advisor: Prof. Jungchul Lee Thesis: Computer vision-based analysis for high temperature annealing and dropwise condensation
19.05 – 20.12	KATUSA, Republic of Korea Army 19 months of mandatory military service
15.09 – 18.12	University of Minnesota–Twin Cities B.S., Mechanical Engineering (GPA 3.75 / 4.00) Dean's List: 2015 Fall, 2016 Spring, 2017 Spring, 2017 Fall, 2018 Spring

RESEARCH INTERESTS

Egocentric vision • 3D human pose and motion forecasting • Multimodal LLMs for 3D reasoning

PUBLICATIONS

★ Highlight * Equal contribution

Motion understanding

Preprint Gaze-hand Trajectory Merging for Efficient Egocentric Video Understanding
J. Jeong*, M. Kim*, Y. Bae*, K. Yoon

Motion prediction

Preprint SRA: Spatial Reasoning Adapter via Evolving Social Interaction Graphs for Trajectory Prediction
J. Jeong*, S. Song*, H. Park, J. Cho, Y. Bae, G. Lee, D. Park, K. Yoon

ECCV 2026 Ego-Human Motion Prediction with 3D-Aware LLM [Code] [Project]
Y. Bae*, J. Jeong*, H. Kim*, K. Yoon

CVPR 2025 Multi-modal Knowledge Distillation-based Human Trajectory Forecasting [Code]
J. Jeong, S. Lee, D. Park, G. Lee, K. Yoon

CVPR 2024 Multi-agent Long-term 3D Human Pose Forecasting via Interaction-aware Trajectory Conditioning [Code] [Project] ★ Highlight
J. Jeong*, D. Park*, K. Yoon

CVPR 2024 T4P: Test-Time Training of Trajectory Prediction via Masked Autoencoder and Actor-specific Token Memory [Code]
D. Park, J. Jeong, S. Yoon, J. Jeong, K. Yoon

AAAI 2024 Improving Transferability for Cross-domain Trajectory Prediction via Neural Stochastic Differential Equation [Code]
D. Park, J. Jeong, K. Yoon

Motion planning

ICCV 2025 Interaction-Merged Motion Planning: Effectively Leveraging Diverse Motion Datasets for Robust Planning ★ Highlight
G. Lee*, W. Jeong*, D. Park, J. Jeong, K. Yoon

IROS 2025 Non-differentiable Reward Optimization for Diffusion-based Autonomous Motion Planning
G. Lee*, D. Park*, J. Jeong*, K. Yoon

Computer vision for manufacturing

2026	Analysis of Multiscale Condensation Phenomena Using a Zero-Shot Computer Vision Framework <i>Advanced Science</i> D. Lee, S. Roh, J. Jeong, K. Yoon, J. Lee, Y. Nam
2023	Near-infrared inspection and machine learning-based prediction for semiconductor membrane cavity structures <i>IEEE-NEMS</i> M. G. Jeong, J. Jeong, T. Kim, B. J. Lee, J. Lee
2022	Predicting AFM topography from optical microscopes using deep-learning <i>Advanced Intelligent Systems</i> J. Jeong, T. Kim, B. J. Lee, J. Lee
2022	Simulation of Germanium-on-Nothing cavity's morphological transformation using deep learning <i>Micro and Nano Systems Letters</i> J. Jeong, T. Kim, J. Lee
2022	PCA-based sub-surface structure and defect analysis for Germanium-on-Nothing using nanoscale surface topography <i>Scientific Reports</i> J. Jeong, T. Kim, B. J. Lee, J. Lee
2021	Cellular and biomolecular detection based on suspended microchannel resonators <i>Biomedical Engineering Letters</i> J. Ko, J. Jeong, S. Son, J. Lee
2018	3D Printed Polymer Photodetectors <i>Advanced Materials</i> S. H. Park, R. Su, J. Jeong, S. Z. Guo, K. Qiu, D. Joung, F. Meng, M. C. McAlpine

AWARDS & HONORS

25.11	Finalist , Qualcomm Innovation Fellowship Korea Interaction-Merged Motion Planning: Effectively Leveraging Diverse Motion Datasets for Robust Planning
24.12	Awardee , Qualcomm Innovation Fellowship Korea Multi-agent Long-term 3D Human Pose Forecasting via Interaction-aware Trajectory Conditioning
22.06	1st Place , KAIST-UNIST Quantitative Investment Competition Slim timeframe momentum investing with statistical augmentation [Code]
21.11	Outstanding Paper Award , Micro Nano Systems Conference J. Jeong, T. Kim, B. J. Lee, J. Lee
21.11	Bronze Award , KSME-SEMES Open Innovation Challenge J. Lee, M. G. Jeong, T. Kim, J. Jeong, B. J. Lee
17.06 – 17.08	UROP Scholarship , University of Minnesota Advisor: Prof. Michael McAlpine — 3D printing polymer photodetectors
15.09 – 18.12	Global Maroon Scholarship , University of Minnesota

TEACHING EXPERIENCE

25.3, 25.9	Teaching Assistant — ME 40059: Introduction to Computer Vision Dept. of Mechanical Engineering, KAIST
22.1, 23.1	Teaching Assistant — Korean Camp School of Digital Humanities and Computational Social Sciences, KAIST

ACADEMIC SERVICE

Reviewer	2024: IEEE Internet of Things Journal 2025: ICCV, IROS, NeurIPS, TPAMI 2026: AAAI, CVPR, ECCV, NeurIPS
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SKILLS

Programming	C, C++, Python
Frameworks	PyTorch
Languages	Korean (Native), English (Native)

LEADERSHIP

26.01 – 26.12	Lab Representative, ViLAB @ KAIST
15.12 – 18.12	Captain, FC Green @ UMN-TC
15.09 – 16.12	Board Member, Korean-American Scientists and Engineers Association (KSEA) @ UMN-TC