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

Jaewoo Jeong

Vocational Timeline

23.03 – **Korea Advanced Institute of Science and Technology**,
Doctoral Candidate in Mechanical Engineering.
Advisor: Prof. Kuk-Jin Yoon

21.03 – 23.02 **Korea Advanced Institute of Science and Technology**,
Masters of Science in 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**
-Served the Korean army for 19 months as a mandatory service

15.09 – 18.12 **University of Minnesota-Twin Cities**,
Bachelor of Mechanical Engineering, *GPA – 3.75/4.00*
Dean's list: 2015 Fall, 2016 Spring, 2017 Spring, 2017 Fall, 2018 Spring.

Research Area

- Motion Prediction and Planning
- Human Motion Understanding and Prediction

Publications (Human Motion Understanding and Prediction)

Preprint Ego-Human Motion Prediction with 3D-Aware LLM
Y. Bae*, **J. Jeong***, H. Kim*, K. Yoon
* denotes equal contribution

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

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

Publications (Motion prediction / planning)

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

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

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

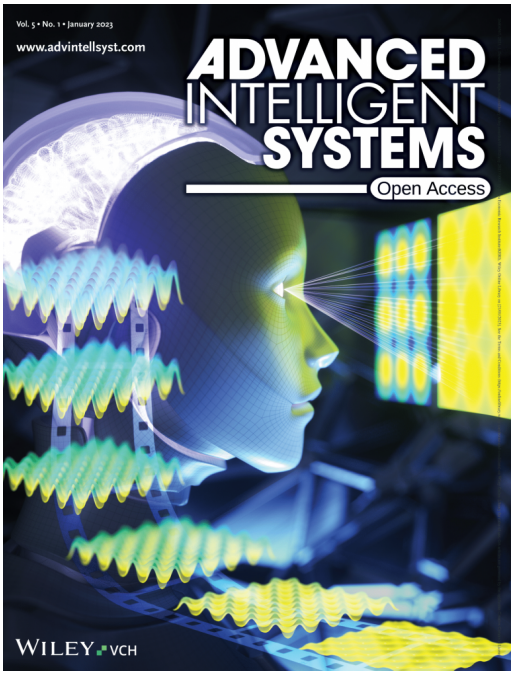
AAAI 2024 Improving Transferability for Cross-domain Trajectory Prediction via Neural Stochastic Differential Equation / Code
D. Park, **J. Jeong**, K. Yoon

Publications (Computer vision for manufacturing)

2026 Analysis of Multiscale Condensation Phenomena Using a Zero-Shot Computer Vision Framework
D. Lee, S. Roh, **J. Jeong**, K. Yoon, J. Lee, and Y. Nam
Advanced Science

2023 Near-infrared inspection and machine learning-based prediction for semiconductor membrane cavity structures
M. G. Jeong, **J. Jeong**, T. Kim, B. J. Lee and J. Lee
IEEE-Nano/Micro Engineered and Molecular Systems

2022 Predicting AFM topography from optical microscopes using deep-learning
J. Jeong, T. Kim, B. J. Lee, J. Lee.
Advanced Intelligent Systems
- Selected as inside back cover
- Featured in multiple medias, including YTN Science Today



2022 Simulation of Germanium-on-Nothing cavity' s morphological transformation using deep learning
J. Jeong, T. Kim, J. Lee.
Micro and Nano Systems Letters

2022 PCA-based sub-surface structure and defect analysis for Germanium-on-Nothing using nanoscale surface topography
J. Jeong, T. Kim, B. J. Lee, J. Lee.
Scientific Reports

2021 Cellular and biomolecular detection based on suspended microchannel resonators
J. Ko, **J. Jeong,**, S. Son, J. Lee.
Biomedical Engineering Letters

2018 3D Printed Polymer Photodetectors
S.H. Park, R. Su, **J. Jeong**, S. Z. Guo K. Qiu, D. Joung, F. Meng, M. C. McAlpine.
Advanced Materials

Awards

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 **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

Skills

Programming Languages
C, C++, Python

Deep Learning Frameworks
PyTorch

Languages
Korean (Native), English (Native)

Extracurricular Activities

22.3 – 22.12	Vocalist, HUG @ KAIST
16.09 – 17.09	Vocalist, Sentimental Sounds @ UMNTC
15.12 – 18.12	Captain, FC Green @ UMNTC
15.09 – 16.12	Board Member, Korean-American Scientists and Engineers Association (KSEA) @ UMNTC