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# 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

- ◆ Human Motion Prediction and Generation
- ◆ Multi-modal LLM

## Publications (Computer Vision)

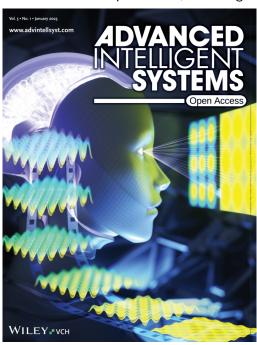
- 4. Multi-modal Knowledge Distillation-based Human Trajectory Forecasting / Code J. Jeong, S. Lee, D. Park, K. Lee, K. Yoon / CVPR 2025
- 3. Multi-agent Long-term 3D Human Pose Forecasting via Interaction-aware Trajectory Conditioning / Code, Project Page
  - J. Jeong\*, D. Park\*, K. Yoon / CVPR 2024 Highlight (2.8% of submitted)
- 2. 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 / CVPR 2024
- 1. Improving Transferability for Cross-domain Trajectory Prediction via Neural Stochastic Differential Equation /  $\sf Code$ 
  - D. Park, J. Jeong, K. Yoon / AAAI 2024

## Publications (Manufacturing)

- 6. 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 / NEMS 2023
- 5. Predicting AFM topography from optical microscopes using deep-learning **J. Jeong**, T. Kim, B. J. Lee, J. Lee.

Advanced Intelligent Systems, 5, 2200317 (2022), IF 7.4.

- Selected as inside back cover
- Featured in multiple medias, including YTN Science Today



- 4. Simulation of Germanium-on-Nothing cavity's morphological transformation using deep learning
  - J. Jeong, T. Kim, J. Lee.

Micro and Nano Systems Letters 10, 22 (2022). IF 3.6

- 3. 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 12, 7205 (2022). IF 4.6

2. Cellular and biomolecular detection based on suspended microchannel resonators J. Ko, **J. Jeong,**, S. Son, J. Lee.

Biomedical Engineering Letters 11, 367–382 (2021). IF 4.6

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 30, 1803980 (2018). IF 29.4

#### **Awards**

24.12 Awardee, Qualcomm Innovation Fellowship Korea.

- 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

 $21.11 \quad \textbf{Bronze Award}, \ \textit{KSME-SEMES Open Innovation Challenge}.$ 

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

#### Skils

#### **Programming Languages**

C, C++, Python

#### **Deep Learning Frameworks**

PyTorch

#### Languages

Korean (Native), English (Native)