# **Kyung-Min Jin**

CONTACT INFORMATION

LG Electornics Multimodal Task

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Seoul, Republic of Korea

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Homepage: https://kyungminjin.github.io

RESEARCH INTERESTS **Designing a novel framework in computer vision domain:** In particular, I conducted research on pose estimation architectures based on transformers combined with convolutional neural networks. After joining LG, I worked on implementing body pose estimation technology to edge devices and achieving state-of-the-art performance for hand pose estimation. I also moved the team to multimodal tasks and worked on developing multimodal models.

**EDUCATION** 

## **Korea University**

Seoul, Korea

### **Department of Artificial Intelligence**

Sep. 2021 - Feb. 2023

- M.S. in Artificial Intelligence
- Thesis: Kinematic Continuity-aware Masked Hierarchical Attention for Pose Estimation in Videos
- Adviser: Seong-Whan Lee
  Laboratory: PRML Laboratory
  Area of Study: Computer Vision
  GPA: 4.50 / 4.50 (100 / 100)

## **College of Informatics**

Mar. 2016 - Aug. 2021

- B.S. in Computer Science & Engineering GPA: 4.02 / 4.50 (94.5 / 100)
- B.S. in Artificial Intelligence GPA: 4.17 / 4.50 (96.2 / 100)
- GPA: 3.99 / 4.50 (94.2 / 100)

**PUBLICATIONS** 

- [1] Tae-Kyung Kang, Gun-Hee Lee, Woo-Jeoung Nam, Hyun-Woo Kim, **Kyung-Min Jin**, and Seong-Whan Lee, "Calibrated Attention Masking Network for Temporal Action Localization," Under Review.
- [2] **Kyung-Min Jin**, Gun-Hee Lee, Woo-Jeoung Nam, Tae-Kyung Kang, Hyun-Woo Kim, and Seong-Whan Lee, "Masked Kinematic Correlation with Hierarchical Attention for Pose Estimation," in *Neural Netw.*, 2024.
- [3] Hyun-Woo Kim, Gun-Hee Lee, Woo-Jeoung Nam, **Kyung-Min Jin**, Tae-Kyung Kang, Geon-Jun Yang, and Seong-Whan Lee, "MHCanonNet: "Multi-Hypothesis Canonical Lifting Network for Self-supervised 3D Human Pose Estimation in the wild Video," in *Pattern Recognit.* (*PR*), 2024.
- [4] **Kyung-Min Jin**, Byoung-Sung Lim, Gun-Hee Lee, Tae-Kyung Kang, and Seong-Whan Lee, "Kinematic-aware Hierarchical Attention Network for Human Pose Estimation in Videos," in *Proc. IEEE Winter Conf. Appl. Comput. Vis.* (WACV), 2023. (Oral)
- [5] Tae-Kyung Kang, Gun-Hee Lee, **Kyung-Min Jin**, and Seong-Whan Lee, "Action-aware Masking Network with Group-based Attention for Temporal Action Localization," in *Proc. IEEE Winter Conf. Appl. Comput. Vis.* (WACV), 2023. (Oral)
- [6] Kyung-Min Jin, Gun-Hee Lee, and Seong-Whan Lee, "OTPose: Occlusion-Aware Transformer for Pose Estimation in Sparsely-Labeled Videos," in *Proc. IEEE Int. Conf. Syst. Man Cybern.* (SMC), 2022. (Oral)

GRANTS AND HONORS	[1] Awarded LG Electronics R&D Scholarships	Sep. 2022
	[2] Awarded Grand Prize Miso AI Model Development Challenge 2021, Infant Behavior Video Data hosted by Ministry of Science and ICT Dec. 2021	
	[3] Encouragement Prize smart campus dataton 2020 in Korea University  Jul. 2020	
RESEARCH EXPERIENCE	Voice caddie	Seoul, Korea
	Golf swing pose, distance assistant device	May. 2020 - Nov. 2020
	<ul> <li>Golf pose estimation model, action localization, and annotation tool</li> <li>Pytorch, C++, and OpenCV</li> </ul>	
INDUSTRIAL EXPERIENCE	LG Electronics	Seoul, Korea
	Artificial intelligence research center	
	<ul> <li>Multimodal Task - Artificial intelligence researcher</li> <li>Cognitive Vision TP - Artificial intelligence researcher</li> </ul>	Jul. 2023 - present Mar. 2023 - Jul. 2023
	Deer corporation	Seoul, Korea
	Electric kick board startup	Jul. 2020 - Feb. 2021
	<ul><li>Frontend developer</li><li>React, Typescript, Next.js, and React Native</li></ul>	
	Klue	Seoul, Korea
	Course evaluation service for Korea University	Jul. 2019 - present
	<ul><li>Frontend developer</li><li>React, Typescript, Redux, and MobX</li></ul>	
TEACHING EXPERIENCE	Teaching Assistant • Teaching Assistant for COSE213-02: Data Structure	Korea University Sep. 2022 - Dec. 2022
	<ul><li>Instructor</li><li>Online 2D Pose estimation course</li></ul>	Inflearn Mar. 2023
CERTIFICATE	<ul><li>Human Resources Development Service of Korea</li><li>Engineer Information Processing</li></ul>	Seoul, Korea Nov. 2021
SKILLS	Computer Programming • Python, JavaScript, and C	
	Deep Learning Frameworks • PyTorch, Tensorflow, and Keras	
	<ul><li>Languages</li><li>Korean (mother tongue)</li><li>English (TOEIC Speaking - Lv. 6 / OPIc - IM1 / TOEIC - 830)</li></ul>	