Youngjoon Jang

PhD Student, KAIST.

Research Interest

• My research aims to effectively train deep neural networks with multi-modality (vision, audio and text). In particular, I am interested in automatic sign language recognition for helping deaf people.

Education

Korea Advanced Institute of Science and Technology (KAIST)	Daejeon, South Korea
Ph.D. in Division of Future Vehicle, School of Electrical Engineering; Advisor: Joon Son Chung	Sep. 2022 – Present
 Korea Advanced Institute of Science and Technology (KAIST) M.S. in Division of Future Vehicle, School of Electrical Engineering; Advisor: In So Kweon Thesis: Learning Methodology According to Characteristics of Continuous Sign Language Recognit 	Daejeon, South Korea Mar. 2020 – Feb. 2022 ion Dataset
Kwangwoon University	Seoul, South Korea
B.S. in Division of Robotics; GPA: 4.3/4.5	Mar. 2014 – Feb. 2020
Work Experience	
Korea Advanced Institute of Science and Technology (KAIST)	Daejeon, South Korea
Researcher, Multimodal AI Lab.	Mar. 2022 - Aug. 2022
PUBLICATION	

International Conferences

- Faces that Speak: Jointly Synthesising Talking Face and Speech from Text.
 Youngjoon Jang*, Ji-Hoon Kim*, Junseok Ahn, Doyeop Kwak, Hongsun Yang, Yooncheol Ju, ILHWAN KIM, Byeong-Yeol Kim, and Joon Son Chung
 Computer Vision and Pattern Recognition Conference (CVPR), 2024.
- Slowfast Network for Continuous Sign Language Recognition. Junseok Ahn*, Youngjoon Jang*, and Joon Son Chung
 International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2024.
- VoxMM: Rich Transcription of Conversations in the Wild.
 Doyeop Kwak, Jaemin Jung, Kihyun Nam, Youngjoon Jang, Jee-weon Jung, Shinji Watanabe, and Joon Son Chung
 International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2024.
- FreGrad: Lightweight and Fast Frequency-aware Diffusion Vocoder.
 Tan Dat Nguyen, Ji-Hoon Kim, Youngjoon Jang, Jaehun Kim, and Joon Son Chung
 International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2024.
- TalkNCE: Improving Active Speaker Detection with Talk-aware Contrastive Learning. *Chaeyoung Jung, Suyeon Lee, Kihyun Nam, Kyeongha Rho, You Jin Kim, Youngjoon Jang, and Joon Son Chung* International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2024.
- Seeing Through the Conversation: Audio-visual Speech Separation based on Diffusion Model.
 Suyeon Lee, Chaeyoung Jung, Youngjoon Jang, Jaehun Kim, and Joon Son Chung
 International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2024.
- That's What I said: Fully-Controllable Talking Face Generation.
 Youngjoon Jang*, Kyeongha Rho*, Jongbhin Woo, Hyeongkeun Lee, Jihwan Park, Youshin Lim, Byeong-Yeol, Kim, and Joon Son Chung
 - ACM International Conference on Multimedia (ACMMM), 2023.
- Self-Sufficient Framework for Continuous Sign Language Recognition.
 Youngjoon Jang, Youngtaek Oh, Jae Won Cho, Myungchul Kim, Dong-Jin Kim, In So Kweon, and Joon Son Chung
 International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2023. (Top 3% Paper Recognition)
- Metric Learning for User-Defined Keyword Spotting. Jaemin Jung*, Youkyum Kim*, Jihwan Park, Youshin Lim, Byeong-Yeol Kim, Youngjoon Jang, and Joon Son Chung
 International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2023.
- Signing Outside the Studio: Benchmarking Background Robustness for Continuous Sign Language Recognition.
 Youngjoon Jang, Youngtaek Oh, Jae Won Cho, Dong-Jin Kim, Joon Son Chung, and In So Kweon
 British Machine Vision Conference (BMVC), 2022.
- KSL-Guide: A Large-scale Korean Sign Language Dataset Including Interrogative Sentences for Guiding the Deaf and Hard-of-Hearing.

Soomin Ham, Kibaek Park, Youngjoon Jang, Youngtaek Oh, Seokmin Yun, Sukwon Yoon, Chang Jo Kim, Han-Mu Park, and In So Kweon

• International Conference on Automatic Face and Gesture Recognition (FG), 2021.

Awards & Honors

International Competitions

- $\circ~1st~Place,$ R-BIZ Challenge TURTLEBOT3 AUTORACE, Nov. 2018
- o 5th Place, Sumo Robot, International Robot Contest (IRC), Oct. 2018
- $\circ~$ 3rd Place, R-BIZ Challenge TURTLEBOT3 AUTORACE, Sep. 2017
- o 5th Place, RoboCup Iran Open Rescue, Apr. 2017

National Competitions

- o 2nd Place, Science and Technology Specialized University Startup Competition (GIST), Nov. 2021
- o 2nd Place, App Startup Support Program Contest (KAIST), Apr. 2021
- $\circ~1st$ Place, RoboCup Korea Open Rescue, Feb. 2017

TEACHING

Teaching Assistance (TA) at FV, KAIST

- $\ast\,$ PD513: Future Vehicle Capstone Design (Spring, 2023)
- * PD513: Future Vehicle Capstone Design (Fall, 2022)
- * PD806: Automobile Special Topics in Mechanical Engineering (Fall, 2021)

TECHNICAL SKILLS

Programming: C, C++, Python, Pytorch