

Youngjoon Jang

PhD Student, KAIST.

Email : jjy@mmmai.io

Webpage: <https://art-jang.github.io>

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) Ph.D. in Division of Future Vehicle, School of Electrical Engineering; Advisor: Joon Son Chung	Daejeon, South Korea 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 Recognition Dataset	Daejeon, South Korea Mar. 2020 – Feb. 2022
Kwangwoon University B.S. in Division of Robotics; GPA: 4.3/4.5	Seoul, South Korea Mar. 2014 – Feb. 2020

WORK EXPERIENCE

University of Oxford Visiting student, VGG group	Oxford, UK May. 2024 - Nov. 2024
Korea Advanced Institute of Science and Technology (KAIST) Researcher, Multimodal AI Lab.	Daejeon, South Korea Mar. 2022 - Aug. 2022

PUBLICATION

International Conferences

- Let Me Finish My Sentence: Video Temporal Grounding with Holistic Text Understanding.
*Jongbhin Woo, Hyeonggon Ryu, **Youngjoon Jang**, Jae Won Cho, and Joon Son Chung*
◦ ACM International Conference on Multimedia (ACMMM), 2024.
- 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

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

National Competitions

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

TEACHING

Teaching Assistance (TA) at FV, KAIST

- * 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