

# Youngjoon Jang

PhD Student, KAIST.

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## 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

<b>Korea Advanced Institute of Science and Technology (KAIST)</b> Ph.D. in Division of Future Vehicle, School of Electrical Engineering; Advisor: Joon Son Chung	Daejeon, South Korea Sep. 2022 – Present
<b>Korea Advanced Institute of Science and Technology (KAIST)</b> 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
<b>Kwangwoon University</b> B.S. in Division of Robotics; GPA: 4.3/4.5	Seoul, South Korea Mar. 2014 – Feb. 2020

## WORK EXPERIENCE

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

## PUBLICATION

### International Conferences

- Test-Time Augmentation for Pose-invariant Face Recognition.  
*Jaemin Jung\*, Youngjoon Jang\*, and Joon Son Chung*  
◦ International Conference on Automatic Face and Gesture Recognition (FG), 2025.
- Lost in Translation, Found in Context: Sign Language Translation with Contextual Cues.  
*Youngjoon Jang\*, Haran Raaresh\*, Lilane Momeni, Gül Varol, Andrew Zisserman*  
◦ Computer Vision and Pattern Recognition Conference (CVPR), 2025.
- VoiceDiT: Dual-Condition Diffusion Transformer for Environment-Aware Speech Synthesis.  
*Jaemin Jung\*, Junseok Ahn\*, Chaeyoung Jung, Tan Dat Nguyen, Youngjoon Jang, and Joon Son Chung*  
◦ International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2025.
- 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\*, Jongbin 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

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### 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

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### 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

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**Programming:** C, C++, Python, Pytorch