Suyeon Lee

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Research Interest

My research focuses on enhancing conversational and auditory experiences in challenging acoustic environments. I am also interested in exploring generative models and multimodal contrastive learning.

Education

Korea Advanced Institute of Science and Technology (KAIST) Mar 2025 - Present
Ph.D. in Electrical Engineering *Advisor: Prof. Joon Son Chung*

Korea Advanced Institute of Science and Technology (KAIST) Mar 2023 - Feb 2025
M.S. in Electrical Engineering *Advisor: Prof. Joon Son Chung*

- Thesis: Multi-modal Speech and Audio Separation System

Korea Advanced Institute of Science and Technology (KAIST) Mar 2018 - Feb 2023
B.S. in Electrical Engineering

Publications *: Equal Contribution

[C3] **FlowAVSE: Efficient audio-visual speech enhancement with conditional flow matching**
Chaeyoung Jung, **Suyeon Lee**, Ji-Hoon Kim, Joon Son Chung
Interspeech 2024

[C2] **Seeing through the conversation: Audio-visual speech separation based on diffusion model**
Suyeon Lee*, Chaeyoung Jung*, Youngjoon Jang, Jaehun Kim, Joon Son Chung
ICASSP 2024

[C1] **TalkNCE: Improving active speaker detection with talk-aware contrastive learning**
Chaeyoung Jung*, **Suyeon Lee***, Kihyun Nam, Kyeongha Rho, You Jin Kim, Youngjoon Jang, Joon Son Chung
ICASSP 2024

Experiences

Undergraduate Research Intern Mar 2022 - Feb 2023
MMAI Lab, KAIST *Advisor: Prof. Joon Son Chung*

Software Engineer Intern Sep 2021 - Feb 2022
AIRS Company, Hyundai Motor Group *Gangnam-gu, Seoul*

- Worked on wake word detection to activate in-car voice assistant

Undergraduate Research Intern Mar 2021 - Aug 2021
SSSC Lab, KAIST *Advisor: Prof. Hoirin Kim*

Undergraduate Research Intern Jun 2020 - Dec 2020
TOPS Lab, KAIST *Advisor: Prof. Kitae Jang*

Honors and Awards

NIST Speaker Recognition Evaluation (SRE) 2024
Achieved 1st Place (Winner) in the Audio Track and 4th Place in the Audio-Visual Track

Skills

Programming: Python, C, PyTorch

Academic Activities

Teaching Assistant Sep 2023 - Dec 2023
KAIST - EE488: Deep learning for Computer Vision

Languages

Korean: Native

English: Proficient