# Jeongsoo Choi

Ph.D. candidate, Multimodal AI Lab. Korea Advanced Institute of Science and Technology (KAIST)

## Contact

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# Research Interest

My research interests lie in Multimodal Machine Learning, Speech Processing, and applications.

- Multilingual and Multimodal Machine Translation
- Audio-Visual Speech Recognition and Generation

# Work Experience

Microsoft, Beijing, China

May. 2024 - Oct. 2024

Research Intern, Speech Team

- Advisors: Shujie Liu and Jinyu Li

## Education

Ph.D. in Electrical Engineering, KAIST

Sep. 2020 - Present

- Advisor: Prof. Joon Son Chung

B.S. in Electrical Engineering, KAIST

Mar. 2015 - Aug. 2020

## **Publications**

# Peer-Reviewed Conferences

C9. **Jeongsoo Choi\***, Se Jin Park\*, Minsu Kim\*, Yong Man Ro

"AV2AV: Direct Audio-Visual Speech to Audio-Visual Speech Translation with Unified Audio-Visual Speech Representation"

**CVPR 2024** 

C8. Jeongsoo Choi, Minsu Kim, Se Jin Park, Yong Man Ro

"Text-driven Talking Face Synthesis by Reprogramming Audio-driven Models"

#### ICASSP 2024

C7. Minsu Kim, **Jeongsoo Choi**, Soumi Maiti, Jeong Hun Yeo, Shinji Watanabe, Yong Man Ro "Towards Practical and Efficient Image-to-Speech Captioning with Vision-Language Pre-training and Multi-modal Tokens"

#### ICASSP 2024

C6. Se Jin Park, Minsu Kim, **Jeongsoo Choi**, Yong Man Ro "Exploring Phonetic Context-Aware Lip-Sync For Talking Face Generation"

## ICASSP 2024

C5. **Jeongsoo Choi\***, Joanna Hong\*, Yong Man Ro

"DiffV2S: Diffusion-based Video-to-Speech Synthesis with Vision-guided Speaker Embedding"

**ICCV 2023** 

C4. Minsu Kim\*, Jeong Hun Yeo\*, **Jeongsoo Choi**, Yong Man Ro

"Lip Reading for Low-resource Languages by Learning and Combining General Speech Knowledge and Language-specific Knowledge"

## **ICCV 2023**

C3. **Jeongsoo Choi**, Minsu Kim, Yong Man Ro

"Intelligible Lip-to-Speech Synthesis with Speech Units"

# Interspeech 2023

C2. Joanna Hong\*, Minsu Kim\*, **Jeongsoo Choi**, Yong Man Ro

"Watch or Listen: Robust Audio-Visual Speech Recognition With Visual Corruption Modeling and Reliability Scoring"

## **CVPR 2023**

C1. Se Jin Park, Minsu Kim, Joanna Hong, **Jeongsoo Choi**, Yong Man Ro

"SyncTalkFace: Talking Face Generation with Precise Lip-Syncing via Audio-Lip Memory"

# **AAAI 2022**

#### Peer-Reviewed Journals

J2. Minsu Kim\*, **Jeongsoo Choi\***, Dahun Kim, Yong Man Ro

"Textless Unit-to-Unit training for Many-to-Many Multilingual Speech-to-Speech Translation Learning with Unit-to-Unit Translation"

TASLP 2024: IEEE/ACM Transactions on Audio, Speech, and Language Processing

J1. Jeong Hun Yeo, Minsu Kim, **Jeongsoo Choi**, Dae Hoe Kim, Yong Man Ro

"AKVSR: Audio Knowledge Empowered Visual Speech Recognition by Compressing Audio Knowledge of a Pretrained Model"

TMM 2024: IEEE Transactions on Multimedia

# **Programming Skills**

## Languages

- Python, C/C++, and MATLAB

# Deep Learning Libraries

- Pytorch, Fairseq, and HuggingFace

## References

#### Prof. Joon Son Chung

- School of Electrical Engineering, KAIST

- Email: joonson@kaist.ac.kr

- Homepage: https://mmai.io/joon

- Relationship: Ph.D. advisor at KAIST