

JIHWAN SEOL

M.S. Applicant @ Seoul, Korea
Speech Processing, Speech Generation, Speech-LLM

E-mail: seoljh0722@cau.ac.kr
Homepage: [Linkedin](#)

Education

Chung-Ang University <i>Bachelor of Science in School of Computer Science and Engineering</i>	Mar 2019 – Aug 2025 Seoul, Korea
---	-------------------------------------

Research Experience

Explainable Language Understanding (ELU) Lab, Chung-Ang University <i>Undergraduate Student Researcher</i>	July 2023 – December 2025 Seoul, Korea
<ul style="list-style-type: none">Developing instruction-based evaluation dataset incorporating emotional and paraverbal speech cues.Designing model architectures to mitigate acoustic gender bias in speech-language models.Conducting research on cross-modal and emotion-paraverbal adaptation using benchmark of linguistic minimal pairs.Constructed evaluation datasets for measuring social bias, and categorical gender bias in speech-language models.Developed a robust target speech extraction system capable of handling diverse overlap ratios and adverse acoustic conditions.Implemented a prompt-conditioned TTS system by integrating StyleTTS2 with PromptTTS.	

Publications (C: conference, W: workshop, T: technical report, P: preprint, *: equal contribution)

[P1] VORTEX: VARIOUS OVERLAP RATIO FOR TARGET SPEECH EXTRACTION R. Oh*, J. Seol* , B. Kim	<i>Preprint, Submitted to ICASSP 2026 (C, under review)</i>
[P2] ACOUSTIC-BASED GENDER DIFFERENTIATION IN SPEECH-AWARE LANGUAGE MODELS J. Choi*, J. Seol , N. Kim, C. Cho, E. Cho, . Kim	<i>Preprint, Submitted to ICLR 2026 (C, under review)</i>
[C1] VOICEBBQ: INVESTIGATING EFFECT OF CONTENT AND ACOUSTICS IN SOCIAL BIAS OF SPOKEN LANGUAGE MODEL J. Choi*, R. Oh, J. Seol , B.Kim	<i>EMNLP 2025 main (C, accepted)</i>

Awards & Honors

Solution Challenge – Global Top 100 <i>Google Developers Groups</i>	2024 Global
<ul style="list-style-type: none">Selected as one of the Global Top 100 teams (out of over 1,700 participating teams) in the Google Solution Challenge.Developed a solution aligned with one or more of the United Nations Sustainable Development Goals using Google technologies.	
Full-tuition scholarship <i>Chung-Ang University</i>	2019 – 2025 Seoul, South Korea

Specialized Skills

Programming Languages: Python, C/C++, Bash, CUDA basics, Dart (Flutter), SQL
Deep Learning Frameworks: PyTorch, TensorFlow, Keras
Audio & Speech Toolkits: HuggingFace Transformers, Librosa, SoundFile, Audacity, Amphion, OpenAI Whisper, ESPnet, Kaldi
Experiment Management & Infrastructure: PyTorch Lightning, Tensorboard, Git, Docker, GCP
Miscellaneous: Linux, Vim, L ^A T _E X

Research Interests

Speech-Language Modeling: acoustic-conditioned LMs, speech-aware instruction following
Bias & Fairness in Multimodal Models: gender bias, paraverbal cues, social bias evaluation
Cross-Modal Learning: emotion-paraverbal adaptation, multimodal representation learning
Generative Speech Models: TTS, target speech extraction, style conditioning