Eunjung Yeo

Google Scholar

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EDUCATION

Seoul National University

Ph.D. in Linguistics (Spoken Language Processing)

Seoul National University

M.A. in Linguistics (Spoken Language Processing)

Yonsei University

B.A. in Korean Language and Literature, Double Major in Psychology

Ewha Girls' Foreign Language High School

English Major, Chinese Minor

Mar. 2021 - Aug. 2024

GPA: 4.24/4.3

Mar. 2019 - Feb. 2021

GPA: 4.18/4.3

Mar. 2014 - Aug. 2018

GPA: 4.03/4.3 (Rank 2/71)

2011 - 2014

Feb. 2024 – Present

Research Experience

CMU ChangeLing Lab (Visiting Scholar)

Research on cross-lingual intelliquility assessment, inclusive ASR for pathological speech, and computational linguistic analysis of self-supervised learning (SSL) representations.

Advised by Prof. David Mortensen.

CMU PhIT Lab (Researcher, Mentor)

Feb. 2024 – Present Research on acoustic analysis of fricative production in dysarthric speech. Mentor for

Summer Undergraduate Research Apprenticeship (SURA).

Advised by **Prof.** Christina Bjorndahl.

SNU SLP Lab (Master's Student, Ph.D. Student)

Mar. 2019 – Aug. 2024

Research on automatic speech assessment for pathological and non-native speech.

Advised by **Prof. Minhwa Chung**.

Yonsei Dept. of Speech-Language Pathology (Graduate Research Assistant)

Mar. - Aug. 2018

Collected and analyzed cognitive, speech, and swallowing data from healthy elderly participants.

Advised by Prof. HyangHee Kim.

Yonsei Institute of Language and Information Studies (Undergraduate RA)

2017 - 2018

Drafted a Korean digital dictionary and collected L2 Korean writing data.

Yonsei Human Development Lab (Undergraduate RA)

2015 - 2017

Collected behavioral data on children's language and moral development.

Publications

Peer-reviewed papers

[Interspeech 2025] C-J Li*, E Yeo*, K Choi, P Pérez-Toro, M Someki, R.K. Das, Z. Yue, J. R. Orozco-Arroyave, Elmar Nöth, D Mortensen. Towards Inclusive ASR: Investigating Voice Conversion for Dysarthric Speech Recognition in Low-Resource Languages.

[NAACL 2025] K Choi, E Yeo, K Chang, S Watanabe, D Mortensen. Allophonic Representations in Self-Supervised Speech Models for Out-of-Distribution Detection in Atypical Speech Pronunciation Assessment.

[ICLR 2025] C Huang, W Chen, S Yang, A T Liu, C-A Li, Y-X Lin, W-C Tseng, A Diwan, Y-J Shih, J Shi, W Chen, X Chen, C-Y Hsiao, P Peng, S-H Wang, C-Y Kuan, K-H Lu, K-W Chang, C-K Yang, F Ritter-Gutierrez, M T Chuang, K-P Huang, S Arora, Y-K Lin, E Yeo, ..., H Li. Dynamic-superb phase-2: A collaboratively expanding benchmark for measuring the capabilities of spoken language models with 180 tasks.

[Interspeech 2023] E Yeo*, K Choi*, S Kim, M Chung. Speech Intelligibility Assessment of Dysarthric Speech by using Goodness of Pronunciation with Uncertainty Quantification.

[ICPhS 2023] E Yeo*, H Ryu*, J Lee, S Kim, M Chung. Comparison of L2 Korean Pronunciation Error Patterns from Five L1 Backgrounds by using Automatic Phonetic Transcription.

[ICASSP 2023] E Yeo*, K Choi*, S Kim, M Chung. Automatic Severity Classification of Dysarthric speech by using Self-supervised Model with Multi-task Learning.

[Phonetics and Speech Sciences] S Lee, E Yeo, S Kim, M Chung. Knowledge-driven speech features for detection of Korean-speaking children with autism spectrum disorder.

[APSIPA ASC 2022] E Yeo, K Choi, S Kim, M Chung. Cross-lingual Dysarthria Severity Classification for English, Korean, and Tamil.

[Oriental COCOSDA 2022] E Yeo, K Choi, S Kim, M Chung. Multilingual analysis of intelligibility classification using English, Korean, and Tamil dysarthric speech datasets. (best student paper)

[Interspeech 2021] A Hernandez, E Yeo, S Kim, M Chung. Automatic Severity Classification of Korean Dysarthric Speech Using Phoneme-Level Pronunciation Features.

[Phonetics and Speech Sciences] E Yeo, S Kim, M Chung. Automatic severity classification of dysarthria using voice quality, prosody, and pronunciation features.

[Interspeech 2020] A Hernandez, E Yeo, S Kim, M Chung. Dysarthria Detection and Severity Assessment Using Rhythm-Based Metrics.

Non peer-reviewed papers

[Under Review] E Yeo, J Liss, V Berisha, D Mortensen. Applications of Artificial Intelligence for Cross-language Intelligibility Assessment of Dysarthric Speech.

[Arxiv] K Choi*, E Yeo*. Opening the Black Box of wav2vec Feature Encoder.

Projects

ROJECTS	
Development of Digital Therapeutics to Improve Communication Skills of Autistic Patients	Sep. 2022 – 2024
Korean Institute for Information & Communication Technology Planning & Evaluation	
Developed an automatic detection system for children with autism.	
Acquiring and Utilizing Audio Big Data for Healthcare Service Design	Sep. $2021 - 2023$
Korean Ministry of Science and ICT	
Designed a speech corpus of chronic kidney disease patients ${\mathfrak C}$ developed an automatic	
detection and severity classification system for chronic kidney disease patients.	
Korean Speech Data for Western and Asian Language Users for Language	Sep. – Nov. 2022
Education	
Korean National Information Society Agency	
Trained an automatic phonetic transcription model $\mathscr E$ pronunciation proficiency assessment	
toolkit for L2 English Korean speakers.	
Multilingual Speech Data Collection for L2 Korean Learners	Jul. – Nov. 2022
Korean National Information Society Agency	
Trained an automatic phonetic transcription model for L2 Korean speech.	
Development of Intelligent Tool-Based Content Production and Enjoyment	Sep. $2019 - 2021$
Support Technology Considering the Accessibility of the Weak in Social	
Communication	
Korean National Information Society Agency	
Developed an automatic speech recognition system for children with autism.	
A Study on the French Vowel Speech of Korean Learners	Aug. – Sep. 2019
Seoul National University	
Collected speech $\ensuremath{\mathfrak{C}}$ nasometer measurements from L2 French Korean speakers.	

GRANTS AND SCHOLARSHIPS

Youlchon AI Young Researcher Scholarship Youlchon AI Scholarship	2023
Travel Grant College of Humanities, Seoul National University	Interspeech 2023
Travel Grant Linguistics Department, Seoul National University	ICPhS 2023
GSI Scholarship Linguistics Department, Seoul National University	Spring 2023
Subsequent Generations of Basic Studies Seoul National University	$Spring\ 2021-Fall\ 2022$
Subsequent Generations of Basic Studies Seoul National University	$Spring - Fall \ 2020$
SNU CORE Academic Funding Seoul National University	Spring – Fall 2019
College of Liberal Arts Alumni Association Scholarship Yonsei Universit	ty Fall 2014
National Grant for Academic Excellence Korea Student Aid Foundation	Spring 2016
Scholarship for Academic Excellence Yonsei University	Spring 2015 – Fall 2016, Fall 2017

Machine Learning Libraries

Data Analytics

Silver Award @ Hackathon Project: Analysis on L2 Korean speech data from Western and Asian speaker		
Organizers: Korean Ministry of Science and ICT, Korea National Information Education Research Center, NS Devil	i Society Agency, SNU AI	
Best Student Paper @ Oriental COCOSDA Paper: Multilingual Analysis of Intelligibility Classification using English, Korspeech datasets.	rean, and Tamil dysarthric	
Grand Prize @ AI data-based service contest, "I can see your A Project: Automatic Screening of Cognitive Decline using Acoustic Features Organizer: Korean National Information Society Agency (NIA)	A.Idea" 2021	
Academic excellence award (top 1%) @ Yonsei University	Spring 2014; Spring 2017	
Academic excellence award (top 10%) @ Yonsei University	Fall 2015; Spring 2016; Fall 2017	
Teaching		
Mentorship		
• Kexin Jin, Pratham Madaram (CMU Cognitive Science undergraduates) — Acoustic analysis of fricatives in dysarthric speech	Summer 2025	
• Alexander Metzger, Aruna Srivastava (UW CS undergraduates) – Fairness in ASR for L2 speech performance	2025–Presen	
 Chin-Jou Li (CMU LTI Master's student) Inclusive ASR for dysarthric speech 	2024–Presen	
 Ji Young Choi (Columbia University Ph.D. student) ASR applications for clinical use 	Jan-May 202	
• Graduate—undergraduate mentoring, Seoul National University	2019	
• Undergraduate—high school mentoring, Yonsei University	2017	
Teaching Assistant		
• Introduction to Speech and Language Processing	Spring 202	
• Introduction to Computational Linguistics	Spring 202	
• Bilingualism	Spring 2021; Fall 2021; Fall 2022	
• Introduction to Linguistics	Spring 2020; Fall 2020	
Invited Talks		
• Introducing OpenAI Whisper @ Korea Development Bank; Korean	National Police University 2023	
• Cross-lingual Dysarthria Severity Classification for English, Korean,	and Tamil @ SNU 2022	
SERVICES		
Reviewer Interspeech, ICASSP, ARR, TASL, JSLHR, SLaTE		
General Affairs Linguistic Research Society, Seoul National University	2021 - 2022	
Volunteer Hearing Rehabilitation Center KT Dream Class, Severance Hospital College Residents' Association Yongjae House, Yonsei University	2017 2014	
SKILLS		
	iterature (Yonsei University #11792)	
9 9	Chinese (beginner), German (reading)	

PyTorch, Huggingface

SciPy, SPSS, matplotlib, pandas