Eunjung Yeo

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EDUCATION

Seoul National University	Mar. 2021 - Aug. 2024
Ph.D. in Linguistics (Spoken Language Processing)	*GPA: 4.24/4.3*
Seoul National University	Mar. 2019 - Feb. 2021
M.A. in Linguistics (Spoken Language Processing)	*GPA: 4.18/4.3*
Yonsei University	Mar. 2014 - Aug. 2018
B.A. in Korean Language and Literature, Double Major in Psychology	*GPA: 4.03/4.3 (Rank 2/71)*

RESEARCH EXPERIENCE

CMU PhIT Lab (Visiting Scholar) — Feb. 2024 – Current
Research on acoustic analysis on fricatives produced by dysarthric patients; Mentor of Summer Undergraduate Research Apprenticeship (SURA)
Advised by Prof. Christina Bjorndahl

CMU ChangeLing Lab (Visiting Scholar) — Feb. 2024 – Current
Research on cross-lingual intelligibility assessment, clinical speech analysis, inclusive technology, computational linguistics; Contributor on Korean G2P in Epitran; Contributor of Phonetics, Phonology, and Prosody tasks in Dynamic-Superb Phase-2
Advised by Prof. David Mortensen

SNU SLP Lab (Masters Student, Ph.D. Student) — Mar. 2019 – Aug. 2024
Research on automatic speech assessment on pathologcial speech & nonnative speech
Advised by Prof. Minhwa Chung

Yonsei Department of Speech-Language Pathology (Graduate Student RA) — Mar. – Aug. 2018
Collected and analyzed cognitive, speech, swallowing data from healthy elderly individuals.
Advised by Prof. HyangHee Kim

Yonsei Institute of Language and Information Studies (Undergraduate RA) — 2017 – 2018
Drafted Korean digital dictionary & Collected L2 Korean writing data.

Yonsei Human Development Lab (Undergraduate RA) — 2015 – 2017
Collected children's behavioral data (language development, 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. Potential 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

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 & developed an automatic detection and severity classification system for chronic kidney disease patients.

Korean Speech Data for Western and Asian Language Users for Language Education	Sep. – Nov. 2022

Korean National Information Society Agency
  Trained an automatic phonetic transcription model & 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 Support Technology Considering the Accessibility of the Weak in Social Communication	Sep. 2019 – 2021

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 Unversity
  Collected speech & 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 University	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

Awards

Silver Award @ Hackathon	2022

Project: Analysis on L2 Korean speech data from Western and Asian speakers for Language Education
Organizers: Korean Ministry of Science and ICT, Korea National Information Society Agency, SNU AI Education Research Center, NS Devil

Best Student Paper @ Oriental COCOSDA	2022

Paper: Multilingual Analysis of Intelligibility Classification using English, Korean, and Tamil dysarthric speech datasets.

Grand Prize @ AI data-based service contest, "I can see your A.Idea"	2021

Project: Automatic Screening of Cognitive Decline using Acoustic Features
Organizer: Korean National Information Society Agency (NIA)

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

Teaching Assistant

- Introduction to Speech and Language Processing — Spring 2023
- Introduction to Computational Linguistics — Spring 2022
- Bilingualism — Spring 2021; Fall 2021; Fall 2022
- Introduction to Linguistics — Spring 2020; Fall 2020

Mentorship

- Kexin Jin, Pratham Madaram (CMU Undergraduate) — 2025 Summer
- Alexander Metzger, Aruna Srivastava (University of Washington Undergraduate) — 2025.02–
- Chin-Jou Li (CMU Masters student) — 2024.09–
- Ji Young Choi (Colombia University Ph.D. student) — 2025.01–
- Graduate-Undergraduate student mentoring @ SNU — 2019
- Undergraduate-High school student mentoring @ Yonsei University — 2017

Services

Reviewer | *Interspeech, ICASSP, ARR, TASL, JSLHR*	
General Affairs | *Linguistic Research Society, Seoul National University*	2021 − 2022
Volunteer | *Hearing Rehabilitation Center KT Dream Class, Severance Hospital*	2017
College Residents' Association | *Yongjae House, Yonsei University*	2014

Skills

Teaching Certificate	Korean Language & Literature (Yonsei University #11792)
Languages	Korean (native), English (fluent), Chinese (beginner), German (reading)
Machine Learning Libraries	PyTorch, Huggingface
Data Analytics	SciPy, SPSS, matplotlib, pandas