Eunjung Yeo

Google Scholar

github.com/eunjung31

∠ eyeo2@andrew.cmu.edu

EDUCATION

Carnegie Mellon UniversityFeb. 2024 - CurrentVisiting scholar at Language Technologies InstituteSeoul National UniversityMar. 2021 - Aug. 2024Ph.D. in Linguistics (Spoken Language Processing)GPA: 4.24/4.3Seoul National UniversityMar. 2019 - Feb. 2021M.A. in Linguistics (Spoken Language Processing)GPA: 4.18/4.3Yonsei UniversityMar. 2014 - Aug. 2018B.A. in Korean Language and Literature, Double Major in PsychologyGPA: 4.03/4.3 (Rank 2/71)

Ewha Girls' Foreign Language High School

English Major, Chinese Minor

RESEARCH EXPERIENCE

CMU LTI ChangeLing Lab (Visiting Scholar)

Feb. 2024 – Current

2011 - 2014

Research on computational linguistics focusing on phonetics and phonology

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 pathological speech \mathcal{E} nonnative speech Advised by Prof. Minhwa Chung

-- Advised by 140j. Milliad Chang

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 behavior data (language development, moral development).

SELECTED FIRST-AUTHOR PUBLICATIONS

Conferences

[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.

[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.

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

Journals

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

Non peer-reviewed papers

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

Development of Digital Therapeutics to Improve Communication Skills	of Sep. 2022 – 2024
Autistic Patients Korean Institute for Information & Communication Technology Planning & Evaluation	on
Developed an automatic detection system for children with autism.	
Acquiring and Utilizing Audio Big Data for Healthcare Service Design Korean Ministry of Science and ICT	Sep. $2021 - 2023$
Designed a speech corpus of chronic kidney disease patients & developed an autor	matic
detection and severity classification system for chronic kidney disease patients.	
Korean Speech Data for Western and Asian Language Users for Language	ge Sep. – Nov. 2022
Education	
Korean National Information Society Agency	,
Trained an automatic phonetic transcription model \mathscr{C} pronunciation proficiency assess toolkit for L2 English Korean speakers.	ment
Multilingual Speech Data Collection for L2 Korean Learners	Jul. – Nov. 2022
Korean National Information Society Agency	oui. 1101. 2022
Trained an automatic phonetic transcription model for L2 Korean speech.	
Development of Intelligent Tool-Based Content Production and Enjoymen	nt Sep. 2019 – 2021
Support Technology Considering the Accessibility of the Weak in Social	al
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 Unversity	Aug. – Sep. 2019
Collected speech \mathcal{E} 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 20	15 – Fall 2016, Fall 2017
Awards	
Silver Award @ Hackathon	2022
Project: Analysis on L2 Korean speech data from Western and Asian speakers for Language	
Organizers: Korean Ministry of Science and ICT, Korea National Information Society Ager Education Research Center, NS Devil	-
Best Student Paper @ Oriental COCOSDA	2022
Paper: Multilingual Analysis of Intelligibility Classification using English, Korean, and Tamspeech datasets.	uil dysarthric
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)	Spring 2014, Spring 2017

Academic excellence award (top 1%) @ Yonsei University Academic excellence award (top 10%) @ Yonsei University

Spring 2014; Spring 2017

Fall 2015; Spring 2016; Fall 2017

Teaching

Languages

Data Analytics

Machine Learning Libraries

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
Invited Talks	
• Introducing OpenAI Whisper @ Korea Development Bank; Kore	an National Police University 2023
• Cross-lingual Dysarthria Severity Classification for English, Kore	ean, and Tamil @ SNU 2022
Mentorship	
- Graduate-Undergraduate student mentoring @ SNU	2019
• Undergraduate-High school student mentoring @ Yonsei Univers	ity 2017
Services	
Reviewer Interspeech (2024-), ICASSP (2025-), ACL (2024), JSLHR (2024)	
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 &	z Literature (Yonsei University #11792)

Korean (native), English (fluent), Chinese (intermediate), German (reading)

PyTorch, Keras, Huggingface

matplotlib, SciPy, pandas, SPSS