ABNER HERNANDEZ

LINGUIST

CONTACT

PHONE

+82 010-9996-5601

EMAIL

abner1724@gmail.com

SKILLS

Python

Pytorch

TensorFlow

Scikit-learn

Praat

Kaldi

R

LANGUAGES

English

Spanish

Korean

LINKS

LinkedIn

Research Gate

GitHub

Personal Website

PROFILE

I am a linguist who is interested in speech recognition and disordered speech, but also any machine learning application to linguistics and speech science.

EXPERIENCE

Laboratory Researcher, Spoken Language Processing Lab — Seoul

Jan 2019 – Present

I work on projects related to dysarthria and speech recognition. My tasks involve:

- Linguistic analysis of dysarthric speech.
- Improving dysarthric speech recognition.
- Develop machine learning-based classifiers for detecting dysarthria or assessing severity levels.
- Research on improving speech intelligibility with speech synthesis-based voice conversion or voice cloning.

Research Assistant, Language and Brain Lab — Burnaby

Aug 2015 - Jun 2017

In general my responsibility was to help Ph.D students with their projects and experiments.

These tasks include:

- Data organization or extraction.
- Annotation or alignments.
- Experimental stimuli preparation.

EDUCATION

MA Linguistics, Seoul National University — Seoul

Sept 2018 - Aug 2020

Focus on computational linguistics, speech recognition, dysarthric speech and phonetics.

Thesis Title: *Automatic Detection and Assessment of Dysarthric Speech using Prosody-Based Measures*

BA (Honours) Linguistics, Simon Fraser University — Burnaby

Sept 2013 - Jun 2017

Focus on phonetics, psycholinguistics and neurolinguistics. Also minored in psychology with a focus on cognitive science.

AWARDS & PUBLICATIONS

- Hernandez, A., Yeo, E.J., Kim, S.H. & Chung, M (2020). Dysarthria Detection and Severity Assessment using rhythm-based metrics. (To appear in Proceedings of Interspeech 2020).
- Hernandez, A., & Chung, M. (2019). Dysarthria Classification Using Acoustic Properties of Fricatives. Proceedings of the 2019 Seoul International Conference on Speech Sciences, 43-44.
- Hernandez, A., Lee, H. Y., & Chung, M. (2019). Acoustic analysis of fricatives in dysarthric speakers with cerebral palsy. Phonetics and Speech Sciences, 11(3), 23-29.
- Korean Government Scholarship Program (2017-2020)