

# 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

Passionate and motivated linguist with an interest in computational linguistics, speech recognition, natural language processing and all machine learning applications to linguistics and speech science.

## EXPERIENCE

### Laboratory Researcher, Spoken Language Processing Lab

Seoul

Jan 2019 – Sept 2020

- 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

- Data organization or extraction.
- Linguistics 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

- A. Hernandez, E.J. Yeo, S.H. Kim and M.H. Chung "Dysarthria Detection and Severity Assessment using Rhythm-Based Metrics," in INTERSPEECH 2020 – 21th Annual Conference of the International Speech Communication Association, October 25-29, Shanghai, China, Proceedings, (to appear 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)