# **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

<u>LinkedIn</u>

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**

# Data Linguist - Independent contractor for 42Maru Inc.

Seoul

Sept 2020 - Current

- Help build datasets for training machine learning-based models.
- Text summarization of financial articles via doccano.

# 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.

<u>Thesis Title</u>: 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.

#### **PUBLICATIONS**

[1] A. Hernandez, E.J. Yeo, S.H. Kim and M.H. Chung "Dysarthria Detection and Severity Assessment using Rhythm-Based Metrics," in INTERSPEECH 2020 (to appear)

[2] Hernandez, A., & Chung, M. (2019). Dysarthria Classification Using Acoustic Properties of Fricatives. Proceedings of the 2019 Seoul International Conference on Speech Sciences, 43-44.

[3] 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.