Sara Ng



RESEARCH

How do the melody, rhythm, and pronunciation of spoken language influence meaning? How can speech technology use these signals?

- Probing speech recognition software for prosodic knowledge
- Acoustic entrainment and surprisal
- Discourse functions of prosody

EDUCATION

University of Washington

Ph.D. in Linguistics, 2024

M.S. in Computational Linguistics, 2023

Advised by: Richard Wright,

Mari Ostendorf

Thesis: Prosody in Human Communication and Machine Understanding

University of Utah

Honors B.A. Linguistics, 2017 B.S. Applied Mathematics, 2017

TESOL Certificate, 2016

Advised by: Abby Kaplan

Thesis: Musical Text-Setting as Evidence for Syllabification of Highly Moraic

Structures in English

SKILLS

Languages:

Python, R, Matlab, HTML/CSS, JS

Machine Learning:

pytorch, tensorflow, Scikit-learn

Linguistic Tools:

Praat, Kaldi, NLTK

Natural Languages:

French (working)
Spanish (basic)
Toisan Chinese (heritage)

Specialized Equipment:

electroglottograph, field recorder, tongue ultrasound

WORK EXPERIENCE

Western Washington University

Sept 2024 - June 2025

Visiting Assistant Professor

 Instructor for: Intro. to Phonetics, Honors Colloquium in Ling., Topics in Phonetics & Phonology, Computational Ling., Language & Society, Patterns in your Mind

University of Washington

Sept 2017 - June 2024

Teaching and Research Assistant

- Instructor or TA for: Intro. to Phonetics, Intro. to Computational Ling., Shallow Processing Techniques for NLP, Swearing & Taboo Language
- Assisted with language documentation, revising teaching resources, and analysis of perceptual data on hearing-impairment

Meta Reality Labs

Research Scientist Intern

June 2022 - Sept 2023

- Developed classification model of hearing impairment for use in Augmented Reality contexts
- Designed tool for automatically labeling conversational dynamics

Google

SWE Intern, Federated Assistant

June 2021 - March 2022

• Analysis and development of data augmentation strategies

Computational Linguist Intern, Pygmalion

Summer 2019

• Designed prosodic DNN to classify code-switching

CaptionCall

Aug 2016 - Mar 2017

Speech Transcriber

RECENT PUBLICATIONS

Probing Whisper Predictions for French, English and Persian Transcriptions

2024; Ballier, Burin, Namdarzadeh, Ng, Wright, Yunès; ICNLP Investigating the Influence of Stance-Taking on Conversational Timing of Task-Oriented Speech

2024; Ng, Levow, Ostendorf, Wright; INTERSPEECH Effects of Information Load and Pragmatic Load on the Hypo-Hyper Continuum

2024; Ng, Freeman, Ostendorf, Wright; Fonetik '24 Investigating the Acoustic Fidelity of Vowels across Remote Recording Methods

2024; Oganyan et al.; Linguistics Vanguard

Properties of Constructed Language Phonological Inventories 2023; Ng & Sleight; UWWPL

Leveraging Prosody for Punctuation Prediction of Spontaneous Speech

2022; Cho, Ng, Tran, Ostendorf; INTERSPEECH