Sara Ng



RESEARCH

How can we use acoustic cues to better interpret natural language?

- Using speech cues to inform general purpose neural language models
- Analyzing speaker entrainment and lexical surprisal on large datasets
- Member of TIAL Lab
- Supported by National Institutes of Health, grant NIH R01 DC006014

EDUCATION

University of Washington

5th year Ph.D. Student Computational Linguistics Advised by: Richard Wright, Mari Ostendorf

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, HTML/CSS, JS, Matlab

Machine Learning:

pytorch, tensorflow, Scikit-learn

Linguistic Tools:

Praat, Kaldi, NLTK

Natural Languages:

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

Specialized Equipment:

electroglottograph, field recorder, tongue ultrasound

WORK EXPERIENCE

University of Washington

Sept 2017 - present

Teaching

- Sole instructor: Computational Linguistics Basics
- Teaching assistant: Intro. to Linguistic Phonetics, Intro. to Computational Linguistics, Shallow Processing Techniquess for NLP, Swearing & Taboo Language

Research Assistant

- Develop resources for language documentation
- Data analysis of perception judgments from hearing-impaired listeners

Google

SWE Intern, Federated Assistant

June 2021 - March 2022

- Identified data types causing failures with existing data augmentation strategies
- Devised new, robust augmentation configurations

Computational Linguist Intern, Pygmalion

Summer 2019

- Curated large annotated dataset for language ID task
- Designed prosodic DNN to classify code-switching

CaptionCall

Aug 2016 - Mar 2017

Speech Transcriber

NLP COURSEWORK

- Core NLP: Shallow Processing Techniques, Deep Processing Techniques, Advanced Statistical NLP, Statistical Learning
- Special interest: Conversational AI, Spoken Dialogue Systems,
 NLP Ethics, Knowledge Engineering

PAPERS & PRESENTATIONS

Modeling the time course of cue weighting angle calculations 2021; Ng, Ellis, Souza, Gallun, Wright; ASA

What does parity mean? A detailed comparison of ASR and human transcription errors

2021; Mansfield, Ng, Levow, Ostendorf, Wright; ASA Revisiting Parity of Human vs. Machine Conversational Speech Transcription

2021; Mansfield, Ng, Levow, Wright, Ostendorf; INTERSPEECH Musical Evidence for Syllabification Patterns of Highly Moraic Structures in English

2017; Jessen, Ng, Rodriguez, Kaplan; Linguistic Society of America