Sara Blalock Ng

Department of Linguistics
University of Washington
Guggenheim Hall Rm. 407-D19

sbng@uw.edu
staff.washington.edu/sbng
github.com/SaraBlalockNg

Research

States of the art in language modeling and related downstream tasks rely on paradigms derived from written language data. My research interest is highlighting what linguistic information is unique to spoken word, and how that can be used to improve computational understanding of natural language. At the University of Washington, I am a member of the Signal, Speech and Language Interpretation (SSLI) Lab in the Department of Electrical Engineering and the Phonetics Lab in the Department of Linguistics.

Current Projects:

- Modeling summarizing statistics of prosody across dialogue turns
- Tacit speaker representations of sesquisyllables in English

Recent Projects:

- Lexical features as predictors of vowel reduction
- Transformers with prosodic cues to detect speech disfluencies in text
- Attitudinal trends in Diaspora Hoisanwa
- Digitizing of narratives in Salish languages (under departmental research assistanceship)

Education

current — University of Washington
4th-year Ph.D. student: Computational Linguistics
Advised by Drs. Richard Wright and Mari Ostendorf

2013-2017 — University of Utah
Honors Bachelor of Arts: Linguistics
Advisor: Dr. Abby Kaplan
Thesis: Musical Text-Setting as Evidence for Syllabification of Highly Moraic Structures in English
Bachelor of Science: Applied Mathematics
TESOL: Teaching English to Students of Other Languages Certificate

Presentations

2018 *Musical Evidence for Syllabification Patterns of Highly Moraic Structures in English*
Linguistic Society of America, with Abby Kaplan and Joselyn Rodriguez
poster

2017 *Musical Evidence for Syllabification Patterns in English*
University of Utah Student Conference in Linguistics, with Jenica Jessen & Joselyn Rodriguez
short talk

2017 *Musical Evidence for Syllabification Patterns of Highly Moraic Structures in English*
Undergraduate Research Symposium, University of Utah, with Jenica Jessen
poster

Research Positions

2021 US National Institutes of Health, grant NIDCD R01
PI: Richard Wright
Research Assistant

2019-2020 US National Science Foundation, grant IIS-1617176
PIs: Mari Ostendorf, Richard Wright
Research Assisstant

2019 Google Core Assistant, Pygmalion
Mentor: Katie Vadella
Intern

2017-2018 University of Washington Linguistics
PI: Sharon Hargus
Departmental Research Assistant

Teaching

Primary Instructorships

2020 Summer LING 473: Basics For Computational Linguistics

Teaching Assistanceships

2020 Fall LING 450: Introduction to Linguistic Phonetics
2019 Spring CSE 472: Introduction to Computational Linguistics
2018 Fall LING 570: Shallow Processing Techniques for Natural Language Processing
2018 Spring LING 269: Swearing and Taboo Language

Graderships

2020 Winter LING 451: Phonology I
2019 Spring LING 452: Phonology II
2019 Winter LING 451: Phonology I

Curriculum Development

2019 Winter Staff assistanceship converting LING 553 (Experimental Phonetics), LING 450 (Phonetics), and ASL Program course materials to online format

Guest Lectures

2019 25 Oct LING 550 (Phonetics I): *Reading Spectrograms*
2019 21 Aug LING 473 (Compling Basics): *Formal Grammars & Parsing*
2019 23 May LING 200 (Intro. Linguistics): *What is Computational Linguistics?*

Awards

2018 Travel Scholarship for Second Ethics in Natural Language Processing Workshop
North American Chapter of the ACL

2017 Top Scholar Award
University of Washington Graduate School

2017 UROP Small Research Grant
University of Utah Undergraduate Research Opportunities Program

2013 President's Scholarship (full-tuition)
University of Utah

Service

2020 **Editor**, University of Washington Working Papers in Linguistics
2020 **Student Volunteer**, Association for Computational Linguistics (ACL)
2020 **Organizing Committee Member**, Northwest Linguistics Conference (NWLC)
2020 **Reviewer**, NWLC
2020 **Proctor**, North American Computational Linguistics Open Competition
2020 **Consultant**, Undergraduate senior capstone in speech translation
2019 **President**, Linguistics Society of the University of Washington (LSUW)
2019 **Student Volunteer**, North American Chapter of the ACL
2018 **Vice President**, LSUW

Skills

Computer Languages

- Python (fluent)
- R (fluent)
- HTML/CSS/JavaScript (fluent)
- Java (basic)
- Matlab (basic)

Machine Learning

- pytorch
- tensorflow
- Scikit-learn

Linguistic Tools

- Praat
- NLTK
- Kaldi

Natural Languages

- French (working)
- Spanish (basic)
- Hoisanwa Chinese (heritage)

Other Work Experience

2016-2017 Speech Transcriber, CaptionCall
2014-2017 Mathematics Tutor