# Sean **Simpson**

### Computational Sociolinguist



www.seanskylersimpson.com

### **Programming**

Python SOL Bash HTML5 CSS3 LaTeX

# **ML Tools**

TensorFlow Keras Scikit-Learn SciPy NumPy Pandas Caret

#### **NLP Tools**

SpaCy OpenNLP Stanford CoreNLP Gensim NLTK TextmineR Tm

### **EDUCATION**

2019 **Doctorate** of Philosophy Georgetown University Computational Linguistics 2016 Master of Science Sociolinguistics 2013 **Master** of Arts University of Hawaii at Manoa Language Documentation & Conservation 2011 **Bachelor** of Arts

### **Work Experience**

2019 - Now Google Los Angeles, CA

Analytical Linguist, Human Evaluation & Signals

Data analysis, experimental design, human computation research, and survey statistics for the Human Evaluation & Signals team in the Ads org.

2018 (Aug-Nov) Google

Linguistics, Anthropology

Analytical Linguist Intern, Ads Human Eval

Developed machine learning models to predict inter-rater reliability and task completion time for new survey templates designed by the Ads Human Evaluation team. Developed an internal R package to aid in the extraction of structural, semantic, and lexical features from survey templates.

**International Monetary Fund (IMF)** 2018 (May-Aug)

Projects Officer, Innovation Lab Unit

Provided consultation and development expertise on a number of issues related to Natural Language Processing and Machine Learning. Primarily focused on designing and implementing a system to predict financial crises based on natural language features extracted from news corpora.

2016 - 2017 **Center for Advanced Study of Language (CASL)** NLP Research Specialist

> Designed and implemented a system to detect newly emerging drug terminology in streaming Twitter corpora in conjunction with experts from the Center for Substance

Abuse Research.

Washington, DC

Los Angeles, CA

### **PUBLICATIONS**

2013

#### **Peer-Reviewed Journal Articles**

2019	Huang, Chengyu, Sean Simpson, Daria Ulybina, and Augustin Roitman. News-based Sentiment Indicators. <i>IMF Working Papers</i> , 273(19). 1–29
2018	Simpson, S. Sean, Nikki Adams, M. Claudia Brugman, and J. Thomas Conners. Detecting Novel and Emerging Drug Terms Using Natural Language Processing: A Social Media Corpus Study. <i>Journal of Medical Internet Research: Public Health and Surveillance</i> , <i>4</i> (1). e2
2016	Kirtley, Joelle, Katie Drager, James Grama, and Sean Simpson. An acoustic analysis of the vowels of Hawaiʻi English. <i>Journal of the International Phonetic Association</i> , 46(1). 79–97
2013	Drager, Katie, Joelle Kirtley, James Grama, and Sean Simpson. Language variation and change in

Hawai'i English: KIT, DRESS, and TRAP. University of Pennsylvania Working Papers in Linguistics, 19(2). 40-50

Simpson, Sean. The Endangered Languages Project: A digital tool for research and engagement. Katoba to Shakai (Language and Society), 15. 135–154

### Door Davioused Conference Dresentations

Peer-Reviewed Conference Presentations			
2017	Simpson, Sean. Reconstructing Thread Structure For Reddit Comments. Poster presented at <i>Mid-Atlantic Student Colloquium on Speech, Language and Learning (MASC-SLL)</i> . Washington, DC		
2016	Simpson, Sean. Keeping up with Cait: A longitudinal analysis of F0 and [s] in the speech of Caitlyn Jenner. Poster presented at <i>New Ways of Analyzing Variation (NWAV) 45</i> . Vancouver, BC		
2014	Drager, Katie, Sean Simpson, James Grama, and Joelle Kirtley. Variation and change in the back vowels of Hawaiʻi English. Paper presented at <i>New Ways of Analyzing Variation (NWAV) 43</i> . Chicago, IL		
2014	Simpson, Sean. Phonetic cues to Localness in Hawaiʻi English: Feature clusters influencing perception. Paper presented at <i>New Ways of Analyzing Variation (NWAV) 43</i> . Chicago, IL		
2014	Simpson, Sean. The Endangered Languages Project: Overview and assessment. Paper presented at <i>The LSA Annual Meeting</i> . Minneapolis, MN		
2013	Campbelle, Lyle, Nala Lee, Eve Okura, Sean Simpson, and Kaori Ueki. New knowledge: Findings from the Catalogue of Endangered Languages. Paper presented at <i>The 3rd International Conference</i>		

2013 Simpson, Sean. Practical applications of the Endangered Languages Project. Paper presented at The 3rd International Conference on Language Documentation and Conservation(ICLDC). Honolulu, HI

on Language Documentation and Conservation (ICLDC). Honolulu, HI

Simpson, Sean. Preliminary results: Phonetic variation and perceived Localness in Hawai'i. Paper presented at *The 17th Annual Graduate Student Conference of Languages, Linguistics and Literature*. Honolulu, HI
 Grama, James, Joelle Kirtley, Katie Drager, Sean Simpson, and Rebecca Clifford. Language variation and change in Hawai'i English: KIT, DRESS and TRAP in motion. Paper presented at *New Ways of Analyzing Variation (NWAV) 41*. Bloomington, IN

### **Book Chapters**

2018	Belew, Anna and Sean Simpson. Language extinction then and now. In Campbell, Lyle and Anna Belew (eds.). Cataloguing the Endangered Languages of the World. Abingdon: Taylor and Francis
2018	Belew, Anna and Sean Simpson. The status of the world's endangered languages. In Campbell, Lyle and Kenneth Regh (eds.). <i>The Oxford Handbook of Endangered Languages</i> . Oxford: Oxford University Press
2018	Heaton, Raina and Sean Simpson. How ELCat serves communities whose languages are at risk. In Campbell, Lyle, John Van Way, and Anna Belew (eds.). <i>Cataloguing the Endangered Languages of the World</i> . Abingdon: Taylor and Francis

## **Teaching Experience**

2018, spring	<b>Teaching Assistant</b> LING/COSC-572: Empirical Methods in NLP	Georgetown University
2017, fall	<b>Teaching Assistant</b> LING-367: Computational Corpus Linguistics	Georgetown University
2017, spring	<b>Teaching Assistant</b> LING-469: Analyzing Language Data with R	Georgetown University
2016, fall	<b>Teaching Assistant</b> LING-481: Sociolinguistic Variation	Georgetown University
2015, fall	Instructor LING-001: Introduction to Language	Georgetown University
2015, spring	Instructor LING-001: Introduction to Language	Georgetown University
2014, fall	Instructor LING-001: Introduction to Language	Georgetown University