

# Katherine Blake

Data Scientist, Amazon Alexa



kmlake95@gmail.com



317 496 7841



katherineblake.github.io

## Coursework

(Graduate-level, Cornell University)

Phonetics, Phonology, Syntax, Semantics, Computational Linguistics, Linguistic Typology, Methodology of Romance Language Learning and Teaching, Historical Linguistics

(Computer Science, Cornell

University) Introduction to Computing with Python (CS1110, Spring 2018), Object-Oriented Programming & Data Structures (CS2110, Fall 2018); Deep Learning Specialization (Coursera)

## Skills

Programming languages: Python (Proficient); Java, MATLAB, SQL (Familiar)

Natural languages: English (Native); French (Proficient); Italian, Spanish (Intermediate)

Programs:  $\text{\LaTeX}$ , Praat, MS Office

Other: Phonetic transcription (IPA)

## Education

2017 - 2022 Doctor of Philosophy in Linguistics  
Cornell University | Ithaca, NY

Dissertation:

*Phonological markedness effects on noun-adjective ordering*

Advisor: Dr. Marten van Schijndel

2013 - 2016 Bachelor of the Arts in Linguistics with Honors, Highest Distinction  
Indiana University | Bloomington, IN

Undergraduate Thesis: *Rhoticity in Cajun French*

Linguistics

Advisor: Dr. Kelly H. Berkson

2013 - 2016 Bachelor of the Arts in French with Highest Distinction  
Indiana University | Bloomington, IN  
Spring 2015 at Université d'Aix-Marseille | Aix-en-Provence, France

## Work Experience

2022 - Language Data Scientist at Amazon Alexa Seattle, WA  
Conduct quantitative and qualitative analyses of large text corpora to improve machine learning models; manage projects and design workflows related to data annotation

Summer 2021 Language Data Research Intern at Amazon Alexa Remote  
Conducted quantitative and qualitative analyses of large text corpora to build datasets for machine learning models that improve routing behavior of customer requests

2020 - 2021 Sr. Computational/Programmer Analyst at Army Research Lab  
Contributed to ongoing projects in neural text-to-speech synthesis and machine translation (evaluation metrics and NER annotation); co-instructor of the visible speech course for GEMS summer program

2019 - 2020 Intern at Synfonica Speech, LLC Ithaca, NY  
Did copy synthesis using Praat to improve text-to-speech output of the company's rule-based synthesizer, wrote English phonotactic rules for speech therapy software (Python), organized code

2019 Graduate Assistant for World Languages Day Cornell University  
Provided administrative support for the WLD at Cornell pilot and served as a consultant for session topics and presenters

2018, 2019 Editor of Semantics and Linguistic Theory (SALT) Academic Journal  
Collected submissions, copy-edited articles, requested edits, compiled and published final proceedings for SALT 28 and 29

2015 - 2017 Research Assistant in Phonetics and Phonology Lab Indiana University  
*Projects:* VOT variation by region and gender in American English stops (experimental); Canadian raising phenomena in Fort Wayne, IN English (experimental); Child phonology study using CHILDES database (corpus)

## Teaching Experience

Spring 2021 Introduction to Phonetics & Phonology Cornell University  
Led discussion sections, evaluated student work, held office hours

Fall 2020 Introduction to Linguistics Cornell University  
Managed Canvas site, Zoom, all online materials, grading; led 1x/week discussion, evaluated student work, held office hours  
Guest lecture: Computational Linguistics

2018 - 2019 First Year French: Fall + Spring sequence Cornell University  
Created communicative-approach lessons, led recitation 4x/week, evaluated student work, held office hours, helped create exams

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(Intermediate)

Programs:  $\text{\LaTeX}$ , Praat, MS Office

Other: Phonetic transcription (IPA)

## Selected Presentations

- [Blake, Katherine](#). (2022). Avoiding phonological markedness via word ordering in French and Italian. Talk at the 2022 Linguistics Society of America (LSA) Annual Meeting. Washington, D.C./Online.
- Al Sagheer, Z., [Blake, K.](#), Iglehart, V., LaRocca, S., Morgan, J., Murray, J. (2020). Shareable TTS Components. Talk at the 2020 American Association for Machine Translation (AMTA) conference. Online.
- [Blake, Katherine](#). (2020). Phonological markedness effects on noun-adjective word order in Italian. Talk at the 2020 Annual Meeting on Phonology (AMP). University of California Santa Cruz, Online.
- [Blake, Katherine](#). (2017). Rhoticity in Cajun French. Talk at the 2017 Hutton Honors College Research Symposium. Indiana University, Bloomington, IN.

## Recognition

2017, 2021	Sage Fellowship Tuition + stipend	Cornell University
May 2017	Induction into Phi Beta Kappa National Honors Society	Indiana University
2017	Provost's Award for Undergraduate Research Social and Applied Science	Indiana University
2013 - 2017	Undergraduate of Highest Distinction All undergraduate career, top academic honors	Indiana University
2013 - 2017	Executive Dean's List All undergraduate career, top Dean's List	Indiana University
2016	Hutton Honors College Research Grant For undergraduate thesis research	Indiana University

## Extra-Curricular

2017 - 2022	Phonetics Lab Member Gave, and provided feedback on, research presentations; participated in critical discussions of academic articles	Cornell University
2019	Flute Choir Member Sight-read, rehearsed, and performed classical music with flute trio	Cornell University
2019	Local Host Site Assistant Organizer For the North American Computational Linguistics Olympiad (NACLO)	Cornell University
June 2018	Workshop: PhonFest 2018 "Mixing it up: From the lab to the field and back again"	Indiana University