Eric Wilbanks

wilbanks.ericw@gmail.com http://EricWilbanks.github.io https://github.com/EricWilbanks

Work Experience

Language Engineer *Amazon - Alexa, San Francisco : Aug 2022 — Nov 2023*

- constructed targeted datasets for Large Language Model supervised fine tuning, in-context learning, and evaluation
- developed Python workflows to automatically identify and correct annotation errors in model training and test sets
- applied NLP techniques to develop dozens of new customer-facing features and improvements
- balanced competing business, product, and user constraints to gather consensus among cross-functional teams on the optimal solution to business problems
- distilled complex data into technical reports and metrics to drive decision-making across multiple teams

Domain Consultant *Research IT, UC Berkeley: Jan 2022 — May 2022*

- crafted solutions for researchers' high-performance-computing, parallelization, and research data management problems through direct consultations
- collaborated closely with a team from diverse technical and research backgrounds to understand users' computing workflows, needs, and constraints

Doctoral Researcher *Linguistics, UC Berkeley: Aug 2016 — Aug 2022*

- planned and executed long-term original research study on speech perception with over 1,000 participants using Amazon Mechanical Turk and in-person laboratory experiments
- performed data analysis in Python/R, using statistical models to generate insights and test hypotheses
- developed Python package for automatic text-to-phoneme alignment for Spanish speech data (`https://fasealign.readthedocs.io`)
- trained 11 undergraduate research assistants in team-based research, annotation schemes, experimental design, and data analysis
- designed technical workshops on NLP and data analysis (`https://ericwilbanks.github.io/#workshops`)

Language Data Researcher *Linguistics, NCSU: Aug 2014 — Aug 2016*

- developed automatic data-processing and transcription pipelines for a corpus of hundreds of hours of interviews
- conducted statistical analyses of patterns of community-level sound change using Python and R, culminating in a Master's thesis and academic publications

Skills

Programming	Python; R; SQL; Bash; git; pyTorch; pandas; NLTK; scikit-learn; Jupyter; LaTeX
Analysis	Hypothesis testing and experimental design; Clustering methods; Dimensionality reduction; LLM prompt engineering; Acoustic analysis; Linear and logistic mixed-effects models
Languages	English *(Native)*; Spanish *(Advanced)*

Education

2018 - 2022	**Ph.D., Linguistics**; University of California, Berkeley
2016 - 2018	**M.A., Linguistics**; University of California, Berkeley
2014 - 2016	**M.A., English Linguistics**; North Carolina State University
2010 - 2014	**B.A., Spanish Language and Literature**; North Carolina State University