# **Tess Monks**

tessmonks@g.harvard.edu | +44 7426347268 tessmonks.github.io

#### **EDUCATION**

## Harvard University, Cambridge, MA

May 2022

MA in Linguistics

Master's Thesis: "Demonstrative Shift and Proximal Markedness"

Relevant Courses:

- Computer Science: Machine Learning, Computational Linguistics & NLP, Data Science
- Linguistics: Semantics, Syntax, Pragmatics, Phonology, Field Methods, Experimental Design
- External Courses: Stanford Machine Learning, NLP with Python for ML, Essential Math for ML in Python

Awards & Honors: Harvard Presidential Scholarship

### University of Richmond, Richmond, VA

May 2020

BA in Latin, Minors in Linguistics, Economics, and Ancient Greek Thesis: "Relative Clause Anastrophe in Cato's *De Agri Cultura*" Awards & Honors: Phi Beta Kappa, Summa Cum Laude

#### PROFESSIONAL EXPERIENCE

Echobox, London, UK

September 20222—Present

### Junior Product Analyst

- Organize goals within a multidisciplinary team of engineers, product managers, and scientists to develop new products
- Propose and pitch new product ideas to leadership based on data analysis of market trends and state-of-the-art research
- Collect and analyze user data before and after product launches to determine success of new features

## Spring Oaks Capital, Remote, USA

June 20222—August 2022

#### Data Science Intern

- Predicted debt-recovery outcomes of customer calls using call transcript datasets
- Created class membership labels for language data from call transcripts and SMS datasets using bespoke convolutional neural networks to ease the burden on call center representatives
- Analyzed the semantics over 1,000 unlabeled call and text transcripts for further classification into intent categories using word embeddings and unsupervised clustering

### HIGHLIGHTED RESEARCH EXPERIENCE

#### Harvard University, Department of Linguistics

#### Graduate Researcher for "Demonstrative Shift and Proximal Markedness"

September 2021—Present

- Created an Evolutionary Game Theory Model and Weighted Finite State Transducer to model semantic change as an interaction of sequential modeling and psycholinguistics
- Pioneered approaches to semantic change by using current language data to explain language shift—proving that computational, experimental, and diachronic linguistics can effectively interface

### Harvard University, Department of Linguistics

## Lead Experimentalist for "Demonstrative Grammaticalization Pathways"

January 2021—Present

- Designed and implemented linguistic surveys for over 200 participants on Prolific Academic
- Cleaned and manipulated original data for regression modeling and significance testing of semantic effects
- Presented at Formal Diachronic Semantics, Linguistics Society of America, S. New England Workshop in Semantics

## Harvard University, School for Engineering and Applied Sciences

# Computational Linguist for "Approaches to Semantic Parsing"

December 2021

- Built a semantic parsing system to convert English queries to SQL queries
- Implemented a rule-based approach based on semantically augmented syntactic parse trees
- Developed an end-to-end seq2seq system to convert text to SQL to compare linguistic theory models to transformer models for best semantic encoding of natural language queries

#### SKILLS

PROGRAMMING LANGUAGES: Python (PyTorch, NumPy, Scikit-Learn, Pandas), R (tidyverse), SQL

MEMBERSHIP: Harvard Meaning & Modality Lab