Tess Monks

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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

Product Associate

- 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 through AWS platforms
- 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—May 2022

- 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—May 2022

- 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