

Madelyn Scandlen

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EDUCATION

Master of Science, Computer Science – GPA: 3.61

Expected Graduation: December 2023

Georgia Institute of Technology – *Atlanta, GA*

- Machine Learning specialization

Bachelor of Science, Computer Science – GPA: 3.71

Graduated May 2022

Georgia Institute of Technology – *Atlanta, GA*

- Intelligence & People concentrations, Linguistics Minor

WORK EXPERIENCE

Data Science Intern (Internship)

May – August 2023

HP Inc. – *Houston, TX*

- Contributed to the AI Systems team by developing business-specific machine learning models.
- Fine-tuned and repurposed open-source LLMs to improve automation for internal resources.

Software Development Intern (Internship)

May – July 2020

State Farm Insurance – *Phoenix, AZ*

- Joined the XR team to implement a Virtual Reality simulation for employee onboarding.
- Implemented a mobile application in the VR simulation using C# for backend and the Unity IDE for UI.

RESEARCH EXPERIENCE

Research Assistant

August 2020 – December 2021

Linguistics Department, Georgia Institute of Technology – Atlanta, GA

Language & Politics in the New South (funded by President's Undergraduate Research Award)

- Transcribed sociolinguistic interviews using PRAAT and analyzed speech trends using R and Python.
- Created surveys deployed on Mechanical Turk to elicit ratings of Southernness and political conservatism to analyze trends in perceptions of political ideology for phonetic features.

Research Assistant

February 2021 – August 2021

DILAC, Georgia Institute of Technology – Atlanta, GA

NLP Analysis on the Works of Ralph Waldo Emerson

- Performed Entity Extraction on collected works of Ralph Waldo Emerson with SpaCy and NeuralCoref libraries and used SparQL queries on WikiData entities to validate correct entities.
- Built a Knowledge Graph of Emerson's frequently mentioned entities for analysis, visualized using D3.

PROJECTS

Generating Adversarial Fake Reviews

September – December 2022

- Create a Generative Adversarial Network to generate fake domain-specific Yelp reviews with a character-level RNN while using a CNN discriminator to assess user style with the purpose of contributing to the development of improved detection models.

Language Acquisition on Reddit

September – December 2021

- Performed topic modeling to categorize the self-disclosed motivation of users of language learning subreddits (*r/learnSpanish*, *r/Spanish*) and predicted the highest level achieved from the user's motivation and time sequential posts on the subreddit.

SKILLS

Programming: R, SQL, Java, Spark, Python

NumPy, Pandas, Keras, PyTorch, Scikit-learn, NLTK, LangChain, Huggingface packages

Skills: Git, Javascript, Tableau