# **Madelyn Scandlen**

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#### **EDUCATION**

# Master of Science, Computer Science

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

#### **EXPERIENCE**

## **Research Assistant (Research)**

August 2020 – December 2021

**Expected Graduation: December 2023** 

Linguistics Department, Georgia Institute of Technology – Atlanta, GA

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

- Collected sociolinguistic interviews from native Georgia residents, transcribed interviews using PRAAT, and analyzed speech trends using R and Python.
- Created surveys to elicit ratings of Southernness and political conservatism to analyze trends in perceptions of political ideology for phonetic features, gender, and race from audio recordings.
- Presented at the 7<sup>th</sup> Linguistics Conference at the University of Georgia (LCUGA7) in 2021.

## **Research Assistant (Research)**

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 SparOL queries on WikiData entities to validate correct entities.
- Built a Knowledge Graph of Emerson's frequently mentioned entities for analysis, visualized using D3.

## **Graduate Teaching Assistant (Teaching)**

August 2022 – May 2023

CS 4510, Automata and Complexity – Georgia Institute of Technology – Atlanta, GA

- Conducted office hours and assisted students in learning about automata.
- Graded homework and exams and recorded lectures into print outs for students to refer to later.

# **Software Development Intern (Internship)**

May - July 2020

State Farm Insurance – Phoenix, AZ

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

#### **PROJECTS**

#### **Generating Adversarial Fake Reviews**

September 2022 – December 2022

Create a Generative Adversarial Network to generate fake domain-specific Yelp reviews with a characterlevel 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: Java, Python, R, SQL

Skills: Keras/PyTorch/Scikit-learn/NLTK packages for Python, D3, LaTeX, Git, Unity