#### Andrew Amadeo

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#### **PROFESSIONAL SUMMARY**

Computational linguist with experience analyzing linguistic data, developing rule-based systems, and evaluating AI speech models. Skilled in Python, data analysis, and model evaluation. Interested in applying computational linguistics and ML expertise to real-world language technologies.

#### **EDUCATION**

Cornell University | B.A. Linguistics, May 2023

GPA: 3.98 | Cornell Tradition Scholar

Relevant coursework: Syntax, Phonology, Phonetics, Python, Data Structures, Advanced Japanese

#### **RELEVANT EXPERIENCE**

# Computational Linguist | Synfonica LLC: August 2023 – May 2024

- Analyzed English linguistic patterns (syntax, morphology, phonetics) to develop and refine rule-based grammar and pronunciation models for text-to-speech (TTS) systems.
- > Collaborated with engineers and researchers to integrate linguistic insights into TTS pipelines, improving model accuracy and output quality.
- Conducted QA testing on ML-driven pronunciation systems to enhance TTS accuracy and naturalness.

# **PROJECTS**

#### Japanese Learning Chatbot (Python, Hugging Face, PyTorch)

➤ Developed an interactive Japanese-learning chatbot that dynamically translates, corrects grammar, and engages in conversation using pretrained NLP models, including a transformer for grammar correction that I fine-tuned.

# Multilingual Vocabulary Explorer (Python, Wiktionary API)

> Built a tool to extract and visualize lexical frequency data and parts of speech across five languages using Wiktionary corpora.

## Question-Answering App (Python, Hugging Face Transformers)

➤ Implemented a web-based QA interface leveraging the DistilBERT model to generate context-based answers from user-supplied text passages.

#### **OTHER EXPERIENCE**

## English Second Language Instructor | JET Program: August 2024 – August 2025

➤ Taught English to grades 3–9, adapting lessons to proficiency levels; collaborated with Japanese teachers to create bilingual, multicultural classroom materials.

**Technical Skills:** Python, Java, TypeScript, JavaScript (React, Node.js, Express), HTML/CSS, Git, Excel, Data Annotation Tools, SQL (basic), Linguistic Analysis (phonetics, phonology, syntax)

Soft Skills: Communication, project coordination, QA, teamwork, Japanese (working proficiency)