716-994-3289 | yliu357@buffalo.edu | http://linkedin.com/in/yixuan-liu-47830823a

### **EDUCATION**

University at Buffalo, SUNY present-06/2025

Master of Sciences in Computational Linguistics GPA: 3.33/4

Buffalo, NY

Coursework: NLP, Information Retrieval, Machine Learning, Computational Linguistics, Phonetics, Syntax I, Semantics II

Nanjing Normal University 09/2020 - 06/2023

Master of Arts in English Language and Literature GPA: 3.86/4

Nanjing, Jiangsu

China Three Gorges University

09/2016 - 06/2020

Bachelor of Arts in English Language and Literature GPA: 3.59/4

Yichang, Hubei

#### **SKILLS & INTERESTS**

- Technical Skills & Tools: Python; Huggingface; JavaScript; Apache Solr; Doccano; MS Office Suite; Praat; WordPress
- Language Skills: Chinese (native); English (fluent); French (basic)

## PROFESSIONAL EXPERIENCES

Web Content Assistant 02/2024 - 06/2024

Nursing Clio, University at Buffalo

Buffalo, NY

• Assist in editing articles, reports, and other written materials for clarity, style, and consistency; maintaining weblinks, updating relevant images with WordPress and ensuring the overall presentation aligns with editorial standards

Language Engineer Intern 09/2022 - 12/2022

iFLYTEK Shanghai Shanghai, China

- Contributed to the construction and development of a TTS corpus for an in-car AI voice assistant; managed the OOV database for lexicon refinement in LLM training; assisted in evaluating and selecting voice assistant speakers.
- Collected, categorized and checked speech data for specific foreign languages and dialects; analyzed speech phenomena and set pronunciation rules based on data in different types of corpora
- Created and optimized grammar-clear conversation prompts for human-interactive systems in educational and industrial scenes; managed and trained remote interns in human labeling projects

### Teaching Assistant, Course: Selected Readings of English Poetry

03/2021

Department of English, Nanjing Normal University

Nanjing, Jiangsu

• Instructed over 95 undergraduate students weekly in the course section "From Wordsworth to Browning"; developed and assigned homework aligned with course materials; designed and proctored exams ensuring academic integrity

## **PROJECTS**

# Wikipedia Information Retrieval Chatbot (GCP, Python, Flask, Apache Solar)

08/2024- 12/2024

- Designed and developed an end-to-end chatbot with document retrieval and chitchat functions; scrapped and indexed 50,000 unique Wikipedia documents on 10 topics with Solar; integrated document retrieval system and chit-chat LLM
- Ensured accurate query classification and effective error handling of the chatbot; developed a Flask-based web application with a user-friendly interface for chatbot interaction and chat data visualization

# Annotation on Political Dogwhistles (Doccano)

02/2024- 05/2024

- Developed, annotated, and analyzed a stereotype-based dogwhistle corpus comprising 60 keywords sourced from news and social media platforms (e.g., Reddit, X); established comprehensive annotation guidelines and labels
- Visualized the annotation results, revealing that intentional overt dogwhistles are the most prevalent type, characterized by their deliberate purpose

# Uli Language Phonetic Report with K-means (Pratt, Python)

08/2024-12/2024

• Manually transcribed endangered language Uli with IPA based on audio documents, created Uli IPA phonetic chart and lexicon; classified and analyzed vowels based on sound formant features with K-means model

#### **English TTS Text Normalization Annotation Project**

11/2022 - 12/2022

- Spearheaded the development of text normalization rules for English TTS corpus annotation; led test set data collection and creating comprehensive annotation guidelines for texts with special characters, optimizing data quality for ML applications
- Selected and trained a team of 17 annotators to ensure compliance with established data annotation standards, providing daily feedback to supervisors and effectively resolving ambiguities and disagreements during the annotation process