# LIZ SIYUN WANG

New York, NY | 213-573-3132 | sw2333@cornell.edu | LinkedIn | GitHub

#### **EDUCATION**

Cornell Tech (Cornell University), New York, NY

May 2025

Jacobs Technion-Cornell Dual Master of Science Degrees, Concentrations in Connective Media and Data Science

Relevant Coursework: Algorithms and Data Structures for Applications, Machine Learning Engineering, HCI and Design

The University of Southern California, Los Angeles, CA

May 2023

Bachelor of Arts in Applied Mathematics (AMCM) and Data Science

Relevant Coursework: Applied Artificial Intelligence, Full-Stack Web Development, Mathematical Statistics

Honors: Dean's List, Academic Achievement Awards

### **TECHNICAL SKILLS**

Coding Languages: Other Tools:

Python (Pandas, NumPy, Matplotlib, Scikit-Learn, NLTK), Java, JavaScript, HTML, CSS, SQL TensorFlow, Hadoop, MongoDB, AWS, Spark, MATLAB, Excel, Figma, Flask, Microsoft Office

#### PROFESSIONAL EXPERIENCE

# AI Camp Inc., NLP Track Data Science Intern, Palo Alto, CA

May 2022 - Aug 2022

- Developed a healthcare consultant chatbot by applying the DialoGPT model using Python. Deployed it into a Discord bot
- Instructed 18 students in the development of three full-stack NLP applications using Python. Led the entire development process, including data preparation, model training, front-end design with HTML, CSS, and JavaScript, and back-end development along with model deployment using Flask
- Mentored 3 teams, managed product development for the teams, and was ranked in the top 5 out of 50 mentors by the entire camp

## Lenovo Group Ltd., Data Science Intern, Beijing, China

Aug 2020 - Aug 2021

- Collected website data by self-learning beautifulsoup, regex, and multithreading techniques to build a dataset of 75k samples for the Automated Essay Scoring project
- Presented team's research on a dialogue model adept at finding common ground with conversation partners at SIGIR 2022

## ACADEMIC PROJECTS

MiniTorch, Cornell Tech (Python)

Fall 2023

- A Python reimplementation of the Torch API designed to be simple, easy to read, test, and incremental
- Implemented efficient tensor object with indexing, storage, transposition, and broadcasting to optimize auto-differentiation system originally built around scalars
- Implemented efficient map, zip, reduce, and matrix multiplication functions by leveraging parallelization. Extended these optimizations
  to CUDA operations, resulting in accelerated tensor model training on both CPU and GPU

# Text Editor Application, Coursera (Java)

Summer 2023

A software application with spelling check, autocomplete, Markov text generation, word path, and readability scoring features

- Conducted a one-pass analysis of the document to efficiently count syllables, words, and sentences, speeding up the computation of the Flesch readability score
- Implemented a Trie data structure that includes inserting words, checking word validity, and predicting completions for a given prefix
- Created NearbyWord class for generating single-operation word mutations for misspelled word suggestions
- Developed a Markov Chain-based text generator to create specified amounts of text from user-provided input

### Fighting Scientific Denialism, USC (Python)

Spring 2022

A research project aimed at combating the dissemination of climate change misinformation on social media to promote public advocacy

- Constructed an LDA model using Python for topic modeling that helped filter 91.8% of irrelevant tweets based on topics
- Trained a random forest classifier to detect "laymansplaining" and "harassment" tweets, with an f1-score of around 0.6
- Represented the team in delivering the final project to 10 research professors and organized feedback as a report

# Parkable, USC (Figma)

Spring 2022

An interactive prototype of a parking space reservation application

- Ideated a product featuring nearby parking discovery, detailed lot info (eg. availability, pricing, hours), visualizing lot layouts, space reservation, e-ticketing, and user reviews for an efficient, pleasant parking experience
- Managed the entire product cycle, conducting user interviews, contextual inquiries, storyboarding, wireframing, and design choices (typography, color). Culminated in crafting an interactive Figma prototype

## PERSONAL INFORMATION

Hobbies: UI/UX Design, Oil Painting, Snowboarding, Tennis, Piano

Immigration Status: US Permanent Resident