Gracie Zhang

g.m.zhang@wustl.edu | linkedin.com/graciemzhang | github.com/graciemzhang

EDUCATION

Washington University in St. Louis

B.S. Computer Science Expected: May 2024

Minors in Human-Computer Interaction and Writing

• **GPA:** 3.57/4.0

• Relevant Coursework: Data Structures and Algorithms, Introduction to Data Science, Object-Oriented Software Development, Probability, Introduction to Visualization, Visual Principles for the Screen

PROFESSIONAL EXPERIENCE

Washington University CSE Department | Section Lead, Teacher's Assistant | Introduction to Computer Science, Data Structures and Algorithms | *Java* Sept. 2021 - Present

- Guide 20+ teaching assistants in effectively communicating novel concepts and problem-solving skills for an introduction class of 400+ students
- Lead weekly group studios that facilitate productive discussion and application of course material
- Hold office hours multiple times a week to resolve issues with code and course content for students with questions about assignments

Hengen Lab | Research Assistant | Systems Neuroscience | Python

May 2022 - Aug. 2022

St. Louis, MO

- Collaborated with Ph.D Candidate Aidan Schneider under the guidance of Professor Keith Hengen to develop and apply supervised Machine Learning methods in charting neural activity across brain states
- Developed multiple Python scripts that collected, cleaned, and analyzed video data to produce features for datasets of 100,000+ rows
- Trained and tuned hyperparameters for Machine Learning models in object and body part identification

ADDITIONAL EXPERIENCE & PROJECTS

SpotiRec | Flask, SQLite, HTML/CSS/Javascript, Heroku

- Web application that allows users to connect their existing Spotify account or create a new one
- Utilize Spotify API to analyze user's listening activity and provide recommendations of songs with similar parameters
- Option to randomize recommendations without any parameter restraints
- Gained experience with APIs, along with backend and frontend elements that create a working web application

Sentiment Analysis Journal | Python—NLTK library, Flask, MySQL, HTML/CSS, D3.js

- Web application that allows users to input journal entries through file upload or form input
- Performs sentiment analysis on given journal entry and all journal entries over time
- Display visualizations demonstrating the most common words used in all journal entries and change in sentiment over time
- Gained experience with data visualizations and the process of sentiment analysis using natural language models

@WashU | React, Figma, HTML/CSS

- React application that redesigns WashU's buildings archive, with an intended audience of prospective, current, and former students
- Created multiple iterations and design systems based on user feedback
- Gained experience with implementing a user interface

AFFILIATIONS & SKILLS

Languages: Python, Java, JavaScript, HTML, CSS

Frameworks and Tools: NumPy, pandas, matplotlib, scikit-learn, AWS, Git, MySQL, React

Honors: Howard Nemerov Writing Scholar

Activities: Writer for Armour Magazine, Editorial Intern for *The Spectacle*