Hillel Steinmetz

Education

University of Washington | MS in Computational Linguistics | Seattle, WA Sep 2021 – Jun 2023

Awards: Ryan Neale Cross Memorial Fellowship

University of Chicago | BA in Linguistics | Chicago, IL Sep 2015 – Jun 2019

Awards: Leonard Bloomfield Prize in Linguistics, Phi Beta Kappa

Employment History

National Aeronautics and Space Administration (NASA)

Jun 2023 - Present

Al & Machine Learning Intern | Mountain View, CA (remote)

- Spearheaded research on the use natural language understanding to automate and modernize legacy air traffic control systems by generating visual taxi instructions directly from radio communications
- Designed a data annotation scheme in collaboration with stakeholders at the FAA
- Supervised an intern's data annotation work, leading to the quick delivery of a complete dataset
- Built a **Python** codebase to process **JSON** data as well as train and evaluate machine learning models

Smart Information Flow Technologies (SIFT)

Jun 2022 - Mar 2023

NLP Research Intern | Minneapolis, MN (remote)

- Trained and optimized a span-level sentiment analysis model to detect disinformation and influence campaigns on social media using the **Transformers** and **PyTorch** packages for **Python**
- Developed a CI/CD pipeline in GitLab and Docker to ensure repository updates remain compatible with dataset schema and a downstream data visualization tool

Saggezza Nov 2020 – Nov 2021

Technical Writer | New York, NY (remote)

- Published 50+ software documentation pages for 5+ products for an S&P 100 financial services firm
- Collaborated with product owners to design documentation portals for readability and navigability

Recent Projects

Transfer Learning Using L2 Speech to Improve Dysarthric Speech Recognition | REPO L

- Researched fine-tuning, multitask learning, and domain adversarial adaptation to improve automatic speech recognition of dysarthric speech for a master's thesis (Advisor: Prof. Gina-Anne Levow)
- Reduced word error rates of dysarthric speech by an additional 7.2%-9.4% compared to model finetuning

Skills

Programming Languages: Python (highly skilled), R (proficient), Bash (proficient), HTML/CSS (proficient), JavaScript (novice), C (novice), SQL (novice)

Python packages: PyTorch, Transformers (Hugging Face), NLTK, NumPy, spaCy, pandas, Matplotlib, scikit-learn, Pytest, gensim

Tools: Git, Jira, CI/CD, Linux, Docker

Natural Languages: Hebrew (advanced), French (intermediate)