
PERSONAL STATEMENT

Experienced and data-driven software engineer passionate about delivering quality ML models and services.

SKILLS

Programming: Python, JavaScript, Java, Golang, HTML, CSS, Shell, SQL, NoSQL

Technologies and Methodologies: AWS, NLP, Pytorch, HuggingFace, Scikit-Learn, Redis, React, Git

CAREER HISTORY

Software Development Engineer II, *Qualtrics*

March 2021 - Present

prev. Software Development Engineer I

January 2020 - March 2021

prev. Software Test Engineer I

August 2018 - January 2020

- Developed and maintained NLP models and services for Qualtrics's Conversational Analytics team, including backend APIs (Node, AWS, NoSQL), NLP models (HuggingFace, Scikit-Learn, Pytorch), and language libraries (Javascript, Python)
- Facilitated end-to-end success of NLP models used for extracting latent information from long-form text (data collection, annotation, modelling, productionization)
- Serviced model implementations for broader use cases across Qualtrics and led integration efforts to drive business value
- Drove efforts for data-driven integrations of NLP models with Qualtrics' Tickets system to allow customers to derive deeper insights
- Mentored and guided multiple interns and peers

Neural Coding Intern, *Allen Institute for Brain Science*

June 2017 - August 2017

- Researched and implemented methods for analyzing multi-dimensional signal data gathered by Neuropixels electrodes implanted in live mice under stimulation
- Used signal processing techniques to extract features for categorizing brain region (Fourier transform, signal filters, wavelet transforms)
- Applied ML algorithms to signal features and labelled datasets to create models for quicker electrode labelling (Scikit-Learn, Pandas, Numpy)
- Implemented small-dataset methods to combat the limited amount of training data while limiting overfitting (imblearn)

Undergraduate Researcher, *Brunton Lab, University of Washington*

December 2016 - June 2018

- Researched NLP methods on naturalistic, low-quality big datasets to automatically derive labels for further research with electrocorticography data (Python, Shell)
- Investigated effects of open-source NLP model architectures being trained on lower-quality data, often half the sampling rate and with significant noise introduced
- Curated training set for use with Kaldi, an open source ASR system, and evaluated multiple model iterations trained on that dataset
- Read state of the art unsupervised speaker diarization papers and tested findings on the lab's dataset to achieve a 72% diarization error rate

EDUCATION

B.S. Honors in Biomedical Engineering

June 2018

University of Washington, Seattle, WA

Certificate in Computational Neuroscience

Cum Laude