Contact

www.linkedin.com/in/yuwenwu (LinkedIn)

Top Skills

Data Analysis Neuroscience

Python

Languages

English (Native or Bilingual)

Spanish (Limited Working)

Chinese (Traditional) (Profession

Chinese (Traditional) (Professional Working)

Certifications

Machine Learning by Stanford University on Coursera

Honors-Awards

Predoctoral Ruth L. Kirschstein National Research Service Award

Barry M. Goldwater Scholarship Honorable Mention

Senior Honors Thesis

Patents

Real Time Fault Tolerant Stateful Featurization

Yuwen Wu

Staff Software Engineer - Machine Learning San Francisco Bay Area

Summary

I am a former molecular neurobiologist turned data scientist with experience in experimental design, statistics, and productionizing machine learning models. I am passionate about telling stories with data, finding new things to learn, and anything food related.

Experience

LinkedIn

4 years 4 months

Staff Software Engineer - Machine Learning March 2023 - Present (2 months)

Senior Software Engineer - Responsible Al January 2022 - March 2023 (1 year 3 months)

Senior Software Engineer - Data Mining/Machine Learning at LinkedIn October 2020 - January 2022 (1 year 4 months)

Part of the Anti-Abuse Al Account Takeover team defending against hacked accounts

- Deployed a model scoring logins in real time to prevent malicious actors from hacking accounts
- Trained multiple iterations of a model that detects hacked accounts across the LinkedIn member base
- Explored various sampling strategies to counteract extreme label skew

Software Engineer - Data Mining/Machine Learning January 2019 - October 2020 (1 year 10 months)

Intuit

Senior Data Scientist January 2018 - January 2019 (1 year 1 month) Mountain View

 Authored production Scala code for company-wide featurization platform that transforms raw data to ML-ready features

- Part of 3 person team that built aggregation capability using Redis to compute features necessary for TurboTax fraud models
- Migrated ETL pipeline for fraud modeling from legacy codebase to AWS as part of initiative to bring fraud detection down from hours to seconds
- Championed application of engineering best practices to tech stack upgrade, such as improved reusability and reduced redundancy in the codebase, CI/CD, consistent code style, and increased documentation
- Experimented with query selection strategies for POC active learning project to decrease false positive rate in fraud detection models

Insight Data Science Fellow

August 2017 - November 2017 (4 months)

San Francisco Bay Area

- Identified employee relationships as part of consulting project with Cultivate Al to allow client human resource departments to better understand employee interactions and behavior
- Performed natural language processing with nltk and spacy of >12,000 Enron emails
- Clustered and visualized groups of emails using DBSCAN and t-SNE
- Built prototype dashboard to visualize email sentiments and clusters of individuals

Boston Children's Hospital Graduate Student Researcher September 2012 - August 2017 (5 years)

- Automated visualization pipeline of neuronal activity and reduced analysis time from hours to seconds
- Developed cell culture model of synapse formation and elimination that allows easier elucidation of molecular mechanisms underlying synapse development
- Performed live imaging of synapse development in cell culture model and demonstrated synapses that form before rivals are more likely to be maintained

Abstracts:

Koyama R*, Wu Y*, et al. A novel in vitro model of synaptic competition.
 Cold

Spring Harbor Wiring the Brain, Cold Spring Harbor, NY, March 24-28, 2015.

- Koyama R*, Wu Y*, et al. A novel in vitro model of synaptic competition. 10th Annual Broad Retreat, Boston, MA, November 16-18 2014.
- Koyama R*, Wu Y*, Thompson A, Frouin A, Bialas A, Chen C, Stevens B. Evidence for presynaptic competition-dependent CNS synapse elimination in vitro. Society for Neuroscience, San Diego, CA, November 2013.

The University of Chicago Undergraduate Researcher September 2011 - June 2012 (10 months)

- Investigated differences in gene expression of different mouse strains
- Classified >10,000 gene observations in Java

Education

Harvard University

Doctor of Philosophy (PhD), Neuroscience · (2012 - 2017)

University of Chicago

Bachelor's degree, Biology/Biological Sciences, General · (2008 - 2012)