

EXPERIENCE

Ernst and Young, Staff Machine Learning/AI Engineer

July 2023 – Present

- Staff Machine Learning/AI Engineer on EY's Tax, Technology, and Transformation Alwin tax automation team specializing in machine learning regression, LLM application development, and data engineering for machine learning/AI tasks
- Built embedded VAT tax code prediction model to identify tax booking issues and secondarily predict issue categories of booking issues. Created potential feature sets based on client conversations and performed feature engineering and hyperparameter tuning to meet accuracy goals. Created PowerBI dashboard to showcase model performance during client conversations.
- Created LLM application and data pipeline for visual processing and data extraction from images of organizational charts. Tool was able to ingest and record relevant information on each entity and relationship in the chart based on either client instructions or a visual key
- Created a natural language queryable graph database populated using an ETL pipeline pulling from cloud relational databases

Ernst and Young, Machine Learning/AI Engineering Intern

June 2021 – July 2022

- Built 3 ML models based on different client specifications for sales and use tax code predictions
- Built ML model for use within firm's internal property tax group for improved price prediction regressions

Economics Undergraduate Research Coding Fellowship

October 2021 – May 2022

- Selected to manage a quantitative economic git repository for a UT Economics PhD candidate
- The completed repository and data pipeline architecture was able to scrape, clean, and analyze tens of millions of Airbnb listings over time for use within time series econometric analysis.

SKILLS

- Python Machine Learning Development (Pandas, scikit-learn, PyTorch)
- Multivariate Machine Learning Regressions
- LLM Application Development (Azure Open AI, Semantic Kernel SDK, Microsoft Copilot Extensions)
- Azure Data Engineering/ Machine Learning (Databricks, Neo4j, Machine Learning Studio)
- Data Visualization and Dashboarding (Streamlit, Power BI)
- Additional Language Experience (SQL, Cypher Query Language, Julia, R)
- Public Speaking

EDUCATION

Honors Economics and Plan II Honors, The University of Texas at Austin

August 2019 – May 2023

- Special concentration and certificate in Scientific Computation and Data Science
- Phi Beta Kappa Honors Academic Society Induction (2023)
- Published capstone Honors Thesis that leveraged sentiment analysis techniques to predict the unemployment rate based on FOMC meeting minutes results as part of an econometric time series analysis.

ADDITIONAL INFORMATION

Languages: English, Intermediate German

Work Eligibility: Eligible to work in the U.S. with no restrictions