Jinyi(Jonathan) Wang

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EDUCATION

University of Southern California, Los Angeles, CA — Aug 2023 - May 2025

Master of Science in Spatial Data Science **GPA**: 3.93/4.00 (Second in the major)

Hangzhou Dianzi University, Hangzhou, China — Sep 2019 - Jun 2023

Bachelor of Management in Informational Management and Information System **GPA**: 3.96/5.00

PRACTICE EXPERIENCE

Lenovo USA — September 2024 - November 2024

AI Model Fine-Tuning and Evaluation,Data Analyst

- **Model Fine-Tuning**:Led fine-tuning for BART and Qwen models using Confluence, WikiHow, and CNN data to enhance generalization. Built efficient training workflows with PyTorch and Hugging Face libraries. Evaluated models with metrics like ROUGE and BLEU, addressing Qwen tokenizer issues to optimize performance.
- **Model Evaluation**:Implemented DeepEval and other frameworks to assess model quality. Analyzed results with advanced metrics, providing insights for better model selection and refinement.
- **Resource Optimization and Framework Development**:Improved GPU utilization, cutting training time from 25 hours per session. Developed a reusable AI fine-tuning framework, successfully applied to multiple models. The framework earned team recognition and was adopted as a technical reference for future data science projects.

Hangzhou Shiping Information Technology Co., Ltd. — July 2024 – August 2024

Community Safety Hazard Detection and Response System,Data Analyst

- **Automated Monitoring System for Safety Hazard Metrics**:Developed an automated reporting system to track hazard identification rate, response time, and completion rate in real time. Identified a 12% improvement in completion rates after analyzing anomalies and addressing staff shortages with optimized staffing solutions.
- **Community Prediction**:Utilized the BERT-Chinese pretrained model to classify and predict safety hazards based on a large volume of community inspection reports and hazard records. Model optimization increased the accuracy of hazard identification from 85% to 98%.
- **Model Optimization and Web-Based Debugging**:Built a web-based debugging tool using the Flask framework to enable dynamic adjustment of BERT model parameters and real-time training monitoring. Reduced training time by 35%, accelerating model optimization and adapting to diverse safety hazard classification needs across communities.

Zhejiang University — May 2022 – May 2023

Smart Campus Canteen, Data Analyst

- **Data Collection and Cleaning**:Automated the collection and cleaning of 50,0000+ pre-packaged food data entries using BeautifulSoup, Scrapy, and Pandas, organizing nutritional information, expiration dates, and usage methods.
- **Exploratory Data Analysis (EDA)**:Performed EDA with Python (Pandas, Matplotlib, Seaborn) to visualize nutritional trends and correlations, enhancing insights into consumer dietary preferences.
- **Model Development and Optimization**:Built dietary preference prediction models using regression and time series techniques (ARIMA, Prophet). Optimized hyperparameters with GridSearchCV and validated models using RMSE and MAE, achieving a 15% improvement in prediction accuracy and enhancing dietary management systems.

PROJECT EXPERIENCE

EconGeo: Intelligent Economic Geography Data Analysis and Forecasting System — February 2024 - May 2024

- **Data Cleaning and Preprocessing**:Integrated data from Zillow, Build On, and BEA, processing 150,000+ records on housing prices, GDP, and salaries. Used distributed computing to clean and normalize data efficiently.
- **Factor Analysis**:Analyzed correlations between GDP, salary levels, and housing prices using Python (Pandas, Matplotlib). Found weak correlation between GDP and housing prices, but a strong positive link with salaries.
- **Time Series Forecasting**:Used ARIMA models to forecast economic trends (2008–2023) and predict housing prices, highlighting continued growth in fast-growing cities and stabilization in slower economies.

SKILLS, LANGUAGES & OTHERS

- **Skills**: Python,SQL,Excel,Tableau,Elasticsearch,Java,HTML,CSS5,JavaScript,Applet Documentation
- **Languages**: Native in Mandarin, fluent in English