XINYUE ZHANG

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SUMMARY

Enthusiastic and solution-driven data scientist with over 4 years of experience in quantitative analytics, predictive modeling, statistical analysis, and machine learning. Proficient in utilizing Python and SQL for translating complex datasets into actionable insights and conveying results to technical and non-technical stakeholders. Adept at mentoring junior staff and collaborating cross-functionally to drive business values and shape product strategy from data.

SKILLS

- **Programming Languages**: Python (numpy, pandas, scikit-learn), SQL, MATLAB, R, Stata
- **Machine Learning**: Regression models, KNN, random forest, deep learning (TensorFlow), time series forecasting
- **Data Visualization**: Python (matplotlib, seaborn), Tableau, Excel
- **Other**: Databricks, Snowflake, A/B testing, Agile/Scrum, version control (Git)

PROFESSIONAL EXPERIENCE

Bank of America Charlotte, NC

Assistant Vice President, Quantitative Services Senior Professional Nov. 2021 – Present

- Designed, built and implemented regression models in Python, resulting in enhanced liquidity risk management and 10% improved accuracy in market predictions; worked with engineering teams to integrate predictive models into production systems
- Developed and deployed streamlined Python scripts for time series data backtesting, leading to 50% time saving in gap analysis
- Conducted comprehensive scenario analysis, including CCAR stress testing, to provide insights and evaluate potential risk impacts
- Collaborated with traders and IT on batch/real-time data integration and model enhancements for improved decision-making
- Mentored and trained 2 junior team members, leading to 30% faster project completion and 25% fewer errors

State Street Corporation Burlington, MA

Business Analyst in Charles River Development May 2019 – Oct. 2021

- Collaborated closely with product managers and developers from product conception to launch in an Agile/ Scrum environment
- Developed SQL queries for robust data extraction and conducted exploratory testing to ensure product functionality and resilience
- Researched and resolved 100+ client enquiries, leading to new business opportunities and a 25% boost in client satisfaction scores

University of Michigan Transportation Research Institute Ann Arbor, MI

Research Assistant Apr. 2019 – May 2019

- Independently collected, cleaned and analyzed transportation data of 2014 to 2016 in Python, comprising 4,000+ accident records
- Utilized and implemented machine learning models including logistic regression and random forest for predictive analytics on accident severity, realizing an accuracy at 0.80; presented findings and key insights (60 pages+) to clients directly

PROJECT EXPERIENCE

Predictive Analysis on Bulldozer Prices

- Leveraged random forest model in Python for time series analysis on 400,000+ records to forecast bulldozer prices, identifying key factors influencing pricing trends. Github

Loan Status Prediction System

- Developed a predictive model on loan application status using support vector machine, achieving an 83% accuracy rate. Github

Movie Recommendation System

- Designed content-based and collaborative filtering movie recommendation systems using almost 10,000 movies to make recommendations based on users' preferences. Github

Mobile Games A/B Testing with Cookie Cats

- Used Bootstrapping to create 500 samples from dataset and analyzed A/B test results to guide game app redesigns. Github

EDUCATION

University of Michigan Ann Arbor, MI

M.S. in Quantitative Finance and Risk Management GPA:3.8/4.0 Sept. 2017 – Dec. 2018

Central University of Finance and Economics Beijing, China

B.S. in Economics (Mathematical Economics and Finance) GPA:3.9/4.0 Sept. 2013 – June 2017