XINYUE ZHANG

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SUMMARY

Enthusiastic and solution-driven data scientist with over 4 years of experience in quantitative analytics, predictive modeling and machine learning. Demonstrated expertise in Python, SQL, Tableau, and A/B testing, with a strong foundation in applied statistical methods. Adept at leading initiatives, collaborating cross-functionally and communicating complex data insights to technical and non-technical stakeholders. Seeking opportunities to leverage my analytical expertise in dynamic, growth-focused organizations.

SKILLS

- **Programming Languages**: Python (numpy, pandas, scikit-learn, Jupyter Notebook), SQL, MATLAB, R
- **Machine Learning**: regression, classification, random forest, XGBoost, deep learning (TensorFlow), NLP, time series forecasting
- **Data Visualization**: Python (matplotlib, seaborn), Tableau, Excel, Google Analytics
- **Tools & Methods**: Databricks, BigQuery, Snowflake, A/B testing, Agile/Scrum, Git/Github, Bloomberg

PROFESSIONAL EXPERIENCE

Bank of America Charlotte, NC

Senior Quantitative Developer (AVP) Nov. 2021 – Present

- Designed, built and integrated predictive regression models in Python, enhancing liquidity risk management and improving market prediction accuracy by 10%; facilitated model deployment to Prod in conjunction with engineering teams
- Developed and deployed streamlined Python scripts for time series data backtesting, leading to 50% time saving in gap analysis
- Conducted comprehensive scenario analysis and CCAR stress testing, offering actionable insights into potential risk trajectories
- Partnered with traders and IT for optimizing batch/real-time front-office data integration, fostering enhanced decision-making
- Mentored junior team members, accelerating project completion by 30%

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

Credit Card Fraud Detection

- Employed logistic regression, KNN and random forest techniques to analyze and detect credit card fraud actions, achieving an accuracy score at 0.93. Github

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

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