ZEYANG YU

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EDUCATION

Northwestern University **Chicago, IL**
Master of Science in Data Science (Analytics and Modeling Specialization); GPA: 4.0/4.0; Sept. 2023 – Aug. 2024
Relevant Coursework: Financial Machine Learning, Applied Statistics, Database Systems, Practical Machine Learning

University of Wisconsin-Madison **Madison, WI**
Bachelor of Arts in Statistics; Certificate in Mathematics; GPA: 3.6/4.0; Received in May 2023
Relevant Coursework: Derivative Securities, Applied Regression Analysis, Probability & Mathematical Statistics

WORK EXPERIENCE

Alliant Credit Union **Chicago, IL**
Data Scientist Intern May 2024 – Present

- Develop a robust Probability of Default (PD) model using Python by leveraging 24-month loan performance data and supervised learning methods like XGBoost to predict loan delinquency and mitigate credit risk
- Implement reject inference analysis to infer the performance of rejected loan applications, integrating these estimates with approved loan data to enhance the PD model's quality and remedy bias
- Conduct model validation using Area Under the Curve (AUC) to assess model performance, and segmented probability scores into quintiles to analyze bad rate percentages in each segment

Huatai Securities Co., Ltd. **Pudong, Shanghai**
Equity Research Analyst Intern June 2023 – Sept. 2023

- Developed a python-based tool to automatically update the sales data and create PDF reports with the relevant graphs for home appliance sector, which significantly reduced the manual process and was highly valued by the manager
- Assisted seniors to prepare the presentation materials of semi-annual earning calls and wrote the meeting minutes

Bank of China **Huzhou, Zhejiang**
Market Risk Analyst Intern June 2021 – Aug. 2021

- Utilized Basel 2.5 Internal Model Method (IMM) to calculate market risk RWA for regulatory reporting purposes and conduct the regulatory back testing
- Collaborated with seniors to calculate VaR and stressed PnL of dummy portfolios for the approval of new financial products, such as interest rate swaps, ensuring compliance with regulatory standards
- Monitored the fixed income markets and produced the daily market risk reports for interest rate products

PROJECT EXPERIENCE

Comparison on Different Methods to Calculate Value at Risk (VaR) Project Dec. 2023 – Feb. 2024

- Implemented a Value at Risk (VaR) engine using Python to calculate VaR and Expected Shortfall (CVaR) for a portfolio utilizing variance-covariance method, historical simulation and Monte Carlo simulation
- Presented the three methods application of various scenarios, and compared the advantages & disadvantages

ACTIVITY

University of Wisconsin-Madison **Madison, WI**
Math Tutor, Department of Mathematics Sept. 2022 – May 2023

- Provided weekly tutorials on the course of pre-Calculus for 30 undergraduate students

Goldman Sachs 2022 Summer Insight Series **Online**
Selected Participant May 2022 – June 2022

- Participated a series of on-line seminars given by GS professionals from risk, IBD, operations, internal audit and engineering divisions and gained a comprehensive understanding on how the investment bank operates

SKILLS & INTERESTS

Certificate: Financial Risk Manager (FRM) Part I Passed
Programming: Python (Pandas, NumPy, Matplotlib, Scikit-Learn), R, SQL, VBA
Software: Bloomberg, Tableau, Microsoft Office Suite
Finance: Option Pricing, Black-Scholes Analysis, Derivative Products, Stress Testing
Quantitative: Time Series Analysis, Monte Carlo Simulation, Supervised Machine learning (Logistic Regression, Random Forest, XGBoost), Unsupervised Machine Learning (K-means), Principal Components Analysis
Language: Fluent in English; Native in Mandarin Chinese
Interests: Go (board game), Bowling, Long-distance Running