SHULIN JI

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EDUCATION

New York University, Center for Data Science New York, NY

Master of Science in Data Science Sept. 2022 – May. 2024 (Expected)

- Courses: Machine Learning, Big Data, Deep Learning, Fundamental Algorithms, Time Series, Causal Inference

Shanghai Jiao Tong University, School of Mathematical Sciences Shanghai, China

Bachelor of Science in Mathematics & Applied Mathematics (Zhiyuan Honors Program) Sept. 2018 – Jun. 2022

- Honors: Outstanding Graduate (top 3%); Academic and Leadership Merit Scholarship ($5000 awarded for the top 5%)

SKILLS

- **Programming and Software:** Python (scikit-learn, numpy, pandas, matplotlib, etc.), C++, MATLAB, SQL, Tableau, LaTeX, SPSS, Weka, Origin, Wind, Microsoft Office (Excel, Word, PowerPoint, etc.), Linux operations
- **Data Science Methods:** A/B Testing, Inference, Machine Learning, DS pipeline in business (cleansing, wrangling, visualization, modeling, interpretation), Statistics, Stochastic Process, Dynamic Systems and Numerical Simulation

PROFESSIONAL EXPERIENCE

PayPal Shanghai, China

Data Analyst Intern in Compliance Platforms Sept. 2021 – Apr. 2022

- Constructed self-inquiry **database dashboards** and official reports to **automate tracking functionality** on business volume and solution efficacy with **SQL** and **Tableau**
- Identified 10+ effective **live issues** to alert potential **algorithmic flaws** with detailed data detection and **interactive data visualization**, and guided further java-based modifications with engineers
- Raised 4 applicative **metrics** for classifying algorithms on imbalanced data with F-beta score, ROC and PR curve
- Designed an automatic **data report email system** for team engineers, and a detailed Compliance **data analysis illustration platform** to enhance communication efficiency between departments

Yinzhi Tech Shanghai, China

Data Engineer Intern in Product Department Jul. 2021 – Sept.2021

- Developed an intelligent platform to automate real-time analysis for investment consulting, including **data dictionary** construction, knowledge graph analysis and **interface design** in **Mockplus**
- Researched the investment diversity of fund managers: constructed a **web-crawler system** in **Python** for data collection, conducted label definition and further **regression analysis**

Lingjun Investment Shanghai, China

Quantitative Researcher Intern in Futures Department Apr. 2021 – Jul. 2021

- Generated 2 effective Supply/Demand **alpha factors** on commodities (methanol, rebar, etc.) in **Python** in **Linux**
- Formed a **data pre-processing** program with high generalization ability, later applied to all 48 futures commodities, **wrangling** all features in structure from unorganized details (diverse update frequency, delayed period, etc.)
- Customized **feature selection** with **product-based** knowledge, nearly tripling the raw volume, based on the former self-conducted Industry Analysis Reports for 48 commodities in Quantitative Futures Fundamentals

PROJECTS EXPERIENCE

Quantile Factor Model and Applications in Financial Technology Jul. 2021 – Jun. 2022

- Developed **Quantile Regression** on **Factor Model** with high-dimensional applications in **MATLAB**
- Generalized the 2-D model to fit 3-D scenarios, and captured quantile-dependent factors (unobserved by PCA) on empirical cases with heavy-tailed errors and outliers
- Implemented Quantile Factor Model on individual **stock prediction** (return rate) with 10 quantitative factor indicators (volatility, momentum, etc.), outperforming traditional Approximate Factor Model and PCA by lowering 8~9% MSE

Statistical Study on Typical Indicators of Credit Card Holders Mar. 2021 – Jun. 2021

- Launched statistical research on 24 features with **normality test, correlation test and non-parametric test**
- Applied Machine Learning methods (**LR, SVM, NN, RF**, etc.) for default probability prediction in **Python**, with further statistical analysis in precision, recall and F-1 score, reaching general accuracy at over 80%