

RENWEN (JACOB) FAN

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EDUCATION

Simon Business School, University of Rochester (GPA 4.0/4.0) **Rochester, NY**
Master of Science in Business Analytics (A STEM-Certified Program) **December 2022**

- Dean's List
- Core Curriculum: Machine Learning with Python scikit-learn; Causal Analytics; Linear Programming; Pricing; NLP and Sentiment Analysis; Big Data; Statistics using R; Marketing Analytics; Data warehousing with SQL

Sichuan University **Chengdu, China**
Bachelor of Economics in Financial Engineering (GPA 3.8/4.0) **June 2021**

- Award of Excellence in the IT-FINANCE Innovation Contest
- Comprehensive Scholarship of SCU (top 10%)
- Outstanding Student Cadre

PROFESSIONAL EXPERIENCE

Economic Analysis and Financial Big Data Lab **Chengdu, China**
Research Assistant, "Price Discovery in Futures Market" Research Group **January 2020 - July 2020**

- Performed research that accounted for more than 80% of price changes; helped professional investors to quantify impact of their quotes in price formation process by analyzing high-frequency trade data.
- Translated time series analysis into common language and provided 3 policy recommendations for Security Regulatory Commission based on outcome of the quantile regression model.

Huaxi Securities Co., Ltd. **Chengdu, China**
Quantitative Analyst Intern, Investment Department **November 2019 - February 2020**

- Eliminated the least efficient 30% investments and improved portfolio performance through compiling trade models, backtesting statistical data, and optimizing key parameters (like open-position condition).
- Created investment reports to management by utilizing Tradestation and MATLAB, including stocks like SZ300750 that made revenue over 700,000 CNY.

PROJECT EXPERIENCE

New Product (Toy Horse) Conjoint Analysis **Rochester, NY**
Project Leader **November 2021 - December 2021**

- Conducted STP analysis to divide customers into 3 distinct groups through prior and post-hoc segmentations (Principal Components Analysis and K-means clustering).
- Predicted complete product profile ratings data based on partial survey and set scenarios to simulate possible market shares; created the profit matrix that contained the profits in all situations.
- Developed dynamic strategies for the product line that enabled the company to achieve 70% market share.

Local Bank Credit Card Approval Prediction Model **Rochester, NY**
Project Leader **October 2021 - November 2021**

- Trained prediction models using Machine Learning algorithms like XGBoost, Random Forest, and Neural Network; other methods like non-linear regressions with interactions and MARS model were also applied.
- Optimized prediction models by changing specifications and evaluated model performance through K-fold cross validation and out-of-bag error.

National Undergraduate Training Program for Innovation **Chengdu, China**
Project Leader **May 2019 - March 2020**

- Scraped data with Python crawler and made an ETL pipeline; refined customer lifetime value model to value Fintech Unicorn companies without public financial information.
- Led a team of 5 people to complete the project and achieved national level (the highest).
- Verified effectiveness of the refined model by applying it to P2P debit/credit platform YRD; final error between real and estimated was controlled within 10%.

ADDITIONAL INFORMATION

- Professional credentials: Securities Qualification Certificate in China.
- Technical skills: Python, R, SQL, Hadoop, Hive, Spark, Tableau, advanced Excel, MATLAB, and Stata.
- Languages: Mandarin Chinese (Native) and English (Fluent).
- Interests: Music, Movies, Basketball (was captain of college team), and Tennis.