Juncheng (Jackson) She

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EDUCATION

Carnegie Mellon University, Tepper School of Business **Pittsburgh,PA**
Master of Science in Computational Finance - MSCF 12/25

Nanjing University, School of Management and Engineering **Nanjing, CN**
B.A. Economics 06/24

- **Major:** Financial Engineering | **GPA:** 4.51/5.00 | **Minister & Management of NFE Association**
- **Relevant Coursework:** Statistics, Probability Theory, Machine Learning, Data Structure, Linear Algebra, ODE, Stochastic Process..

EXPERIENCE

Dynamic Technology Lab (Hedge Fund with $1B) **Shanghai, China**
Quantitative Research Intern (Intraday Mid Freq Strategy on Chinese A-Stock Markets) 05/2024-07/2024

- ***Signal Construction:*** Constructed signals leveraging L3 event data to model market micro structures' hidden information, combined signals with Lightgbm to predict 1 minute returns. Improved r-square to 0.08 in out of sample from 2023 to 2024
- ***Execution Optimization:*** Designed a taking strategy to manage positions and risks, attaining Sharpe Ratio of 7.8 and Annual Return of 40% in paper trading on daily selected 100+ stocks from from 2023 to 2024.3.

Beijing GenWealth Capital Co., Ltd (Prop Shop in China) **Shanghai, China**
Quantitative Research Intern (Intraday Mid Freq Strategy on Chinese Commodity Future Markets) 03/2024-05/2024

- ***Automatic Signal Generation Framework:*** Applied Genetic Programming with down-sampling and manual data analysis to construct 30+ signals, achieving over 8% correlation with 1 minute label and decay time exceeding 200 seconds.
- ***Monetization:*** Filtering signals by designing metrics to evaluate non-linear performance and utilized rule-based filter for trading positions to enhance the monetization.
- ***Backtesting Framework&Trading Optimization:*** Built a backtesting framework that accounts for fees and queuing issues and optimize trading venue to decrease 10% transaction cost.

WenBo(Shanghai) Investment Company (Hedge Fund with AUM $5B) **Shanghai, China**
Quantitative Research Intern (Intraday Mid Freq Strategy on Chinese A-Stock Markets) 08/2023-03/2024

- ***Calculation Acceleration:*** Redesigned O(1) level signals in C++ to speed up calculation process from 800us to 40us.
- ***Stocks Cluster:*** Clustered stocks using DTW to deal heteroscedasticity and tuned models to improve oos R^2 from 0.07 to 0.08.
- ***Live Trading Framework Design:*** Developed a live trading position inspecting framework by parallel computing. Achieved a time of only 100us from data arrival to order execution and got average 0.1% daily return in 2 weeks live trading.

PROJECT & COMPETITION

Factor Synthesis and Returns Prediction **Remote**
Assistant Research, University of Chicago, RiskLab (Supervised by Prof. Dacheng Xiu) 05/2023-05/2023

- ***Deep Learning Application:*** Applied LSTM&Transformer with Incremental PCA, and AutoEncoder for dimensionality reduction, achieving a cumulative prediction Correlation of 100 and Annual Sharpe Ratio of 1.3 from 2015-2019.
- ***Data Cleaning:*** Cleaned 5min commodity futures data and calculated high-frequency tick-bars from 5-min price quotes of various contracts, and increased the correlation to 0.9.

Optiver Ready Trader Go HFT Competition(Top 15%) **Remote**
Team Member (Market Making Strategy with AS Model) 02/2023-03/2023

- ***AS Model Implementation:*** Implemented Avellaneda & Stoikov' Strategy on ETF future's market. Used GARCH (1,1) to estimate volatility, achieving a 3% return in a week in backtesting framework.
- ***Treasury Risk Management:*** Implemented a delta neutral hedging strategy with a±0.1 delta range, using LOB for inventory risk management, achieving a 20% transaction rate for listed orders.

ADDITIONAL INFORMATION

- **Languages:** Mandarin Chinese; English
- **Computer Skills:**Python (PyTorch for deep learning), C++, Linux(Shell Script), SQL, Matlab, R
- **Awards:** Kaggle Predict Student Performance from Game Play (Bronze Medal)