ZIXIAO(TODD) WANG

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EDUCATION

NEW YORK UNIVERSITY   New York, NY
The Courant Institute of Mathematical Sciences
M.S. in Mathematics in Finance (expected Dec 2022)
- *Coursework:* portfolio theory, Monte Carlo simulations, dynamic pricing and programming, machine learning, stochastic process, computational statistics, big data application

JILIN UNIVERSITY   Changchun, CN
Bachelor of Economics in Financial Mathematics (2017- 2021)
- *Coursework:* probability and statistics, time series, PDE, SDE, derivatives, machine learning.
- *Senior Thesis:* "The Application of Deep Learning in Stocks Selection"
- *Awards:* National 2nd Prize in China Mathematical Contest in Modeling, National 1st Prize in Chinese Mathematics Competitions, National Scholarships, Outstanding Graduates

EXPERIENCE

SHENYI INVESTMENT (one of first registered hedge funds in China)   Shanghai, CN
Summer Quantitative Research Intern   Jun 2021 - Aug 2021
- Implemented rolling statistical test and machine learning model to synthesize macro data into a monthly indicator reflecting the rotation of market style between value and growth.
- Used Python to realize Fundamental-consensus, Technical, Intraday and Expected-real Ratio alpha based on sell-side research with SQL to select raw data and update alpha.
- Tested different ways to prepare unbalanced stocks data and compared the Boruta model with random forest and xgboost in feature selection before the classic machine learning process.
- Self-designed bagging framework to replace decision trees with adaboost, xgboost and LGBT.
- Applied time-series and cross-section data analysis towards agency-recommended stocks pool trying to rank agencies and find momentum or reverse premium behind.

HUATAI SECURITIES   Nanjing, CN
Quantitative Research Intern, Securities Investment Department   Jan 2020 - Feb 2020
- Assisted in alpha hedge strategy and used Numpy to realize technical alpha factors.
- Applied extensive research reports of stock selection models and used Python (sklearn etc.) to test boosting, random forest, bayesian and SVM in stocks selection.
- Learned combinatorial optimization theory and applied it in industry risk control.

PROJECTS

JILIN UNIVERSITY   Changchun, CN
Research on the Application of Deep Learning in Stocks Selection   Dec 2020 - May 2021
- Completed data cleaning and resampling using Pandas and Tensorflow in Python.
- Applied feature selection based on IC and PCA on price-volume and fundamental dataset.
- Designed the structure of MLP, LSTM and CNN to fit the database and debugged parameter and hyperparameter of the model to make bias-variance tradeoff.

THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE   London, UK
LSE Summer School, Financial Market   Jul 2019 - Aug 2019
- Mastered modern financial topics including arbitrage pricing, market structure and noise.
- Exposed to behavioral finance, explaining the long-term premium in momentum strategy.

COMPUTATIONAL SKILLS/OTHER

- *Programming Languages:* Python (pandas/tensorflow/numpy/sklearn/dbconnection), Matlab (Monte Carlo/finite differential), R (time series), Java (data structure/computation in finance)
- *Languages:* English (fluent), Chinese (native),   *Certifications:* CFA Level I Candidate