LI LINFENG

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EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE *Aug 2021 - Present*
Doctor of Philosophy (Quantitative Finance) **Overall GPA**: 4.9/5.0

NATIONAL UNIVERSITY OF SINGAPORE *Aug 2019 - Jan 2021*
Master of Science (Quantitative Finance) **Overall GPA**: 4.9/5.0

SOUTHWESTERN UNIVERSITY OF FINANCE & ECONOMICS *Sep 2015 - Jun 2019*
Bachelor of Economics (Finance (Bilingual)) **Overall GPA**: 4.0/5.0

TECHNICAL STRENGTHS

Financial Time Series, Numerical Computation, Machine Learning, Reinforcement Learning

- **Python**: Algo Trading, Machine Learning, Deep Learning, and Reinforcement Learning
- **C++**: Numerical Methods in Quantitative Finance (NUS) and high-frequency trading strategies;
- **R**: Financial Time Series Modelling, Data Visualization (NUS);
- **SAS**: Obtained SAS Base Certificate and SAS Advanced Certificate, 2017
- **Matlab**: Numerical Computation in Quantitative Finance
- **Scala**: High-frequency Crypto Trading Strategies

RESEARCH EXPERIENCE

On Perpetual Contract Pricing Aug 2021 - Present

- Investigate the mechanism of perpetual contract in the crypto exchanges such as BitMEX and Binance;
- Analyse the upper and lower boundaries for the perpetual contract price;
- Test carry strategies on different cryptocurrencies using the perpetual contracts and spots.

Credit Rating for Small & Midsize Enterprises (SMEs) Jun 2022 - Present

- Collect various information for Chinese SMEs, conduct data cleaning, and extract features from the dataset;
- Build advanced machine learning models to predict company loan default probability.

RL for Optimal Arbitrage Strategies on Stock Index Futures May 2023 - Present

- Utilize the penalty method to solve classical variational inequalities for the optimal arbitrage strategies;
- Propose an RL approach to solving the continuous-time optimal arbitrage strategies on stock index futures;
- Compare the optimal boundaries calculated by the penalty method and by the proposed RL algorithm;
- Conduct an empirical study on the CSI 300 Index and achieve decent performance.

WORK EXPERIENCE

ROC Square - *Internship* Singapore
Quantitative Researcher (Develop quantitative strategies in Crypto market) *Dec 2021 - Present*

- Develop market-making strategies and minute arbitrage strategies;
- Develop hourly and weekly multi-factor trading strategies;
- Build options real-time volatility surface.

NExT++ - *Internship* Singapore
Quantitative Researcher (Develop quantitative strategies in China market) *Jan 2020 - May 2021*

- Enhance the functionality of the trading system vnpy for backtesting and automatic trading;
- Develop trading strategies for Chinese options and futures markets.

ADDITIONAL INFORMATION

Miscellaneous Information

- Passed CFA Level I, IELTS(7.0), GMAT(710)