

GEZHI XIU

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EDUCATION

Peking University, Beijing

2018 - 2023

Ph.D. in Science, advised by Prof. Yu Liu

Institute of Remote Sensing and Geographical Information Systems

Imperial College, London

Sept 2021 - June 2022

Visiting Ph.D., advised by Prof. Henrik Jeldtoft Jensen

Centre for Complexity Science, Department of Mathematics

Peking University, Beijing

2014 - 2018

B.S. in Mathematics and Applied Mathematics.

School of Mathematical Sciences

EXPERIENCE

Sixie Capital

Shanghai

Quantitative Researcher on China's stock market

Aug. 2023 - Present

Alpha research on orderbook:

- I have derived ~ 10 sets of daily features through trading behavior identification in China's A-Stock market: order splitting, timestamp alignments, order type transitions, intraday seasonality, etc.
- Signals are engineered to be least-exposed to specific stocks, date signatures, and style factors.
- Features are rolling fitted by DL models.

Feature exposure studies:

- Orderbook features typically are highly exposed to volatility and trading activeness, creating unnecessary colinearity and fake chemistry among features to be captured by ML models.
- I designed and implemented Causal-Hist-Infer project to delinearize signals from known risk-factors through non-linear conditional expectations.

Python toolkit for orderbook modeling:

- Tick-data is unstructured data and thus hard to vectorize.
- I designed and implemented a Python wheel named oblib (close-sourced) to filter relevant events by masking and reindexing various fields, especially cases such as pairing non-order-preserving events (e.g. order placed and cancels).

AXQ Capital

Beijing, reporting to New York

Quantitative Researcher on US's stock market

Jul. 2022 - Jun. 2023

Alternative data alpha research:

- I have used **recruitment data** to derive ~ 300 features based on location expansions and JD's similarity with industry averages. Features were traded as 30% of the PM's book;
- I used **I/B/E/S** data to make over 200 features based on estimation adjustments and analysts' credibility. Features were traded as part of the PM's book.

SELECTED PUBLICATIONS

Xiu G, Wang J, Gross T, et al. Mobility census for monitoring rapid urban development. *Journal of the Royal Society Interface*, 2024, 21(214): 20230495.

Xiu, G., Wang, J., & Liu, Y. (2023). Spatial Yule Model for Urban Growth with Shared Resources. *Physica A: Statistical Mechanics and its Applications*, 619, 128716.

Xiu, G., & Chen, H. (2023). Unravelling the variations of the society of England and Wales through diffusion mapping analysis of census 2011. *Journal of the Royal Society Interface*, 20(205), 20230081.