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Personal Information:

Date of birth: Sep 5, 1994
Sex: Male
Citizenship: Chinese

Undergraduate Studies:

B.A., Economics, School of Economics, Capital University of Economics and Business, 2016.

Master Level Work:

M.S., Quantitative Economics, International School of Economics and Management, Capital University of Economics and Business, 2019

Graduate Studies:

Singapore Management University, 2019 to present
Thesis Title: "Essays on High-Frequency Financial Econometrics"
Expected Completion Date: June 2024

Thesis Committee and References:

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Teaching and Research Fields:

Primary fields: Econometric Theory
Secondary fields: Financial Econometrics

Teaching Experience:

Teaching Assistant:
ECON698 Continuous Time Financial Econometrics (Master), SMU, 2021-2024
DSA201 Statistical Inference for Data Science (Undergraduate), SMU, 2023
ECON611 Econometrics I (PhD), SMU, 2020-2021

Research Experience:

Research Assistant for Prof. Jia Li, Singapore Management University, 2021-2023

Professional Activities:

Referee service: *Journal of Econometrics*

Conference and Seminar Presentations:

The MPSS (Monash-Princeton-SJTU-SMU) Conference in Econometrics, 2023
SH3 Conference on Econometrics (Virtual), 2022
Econometric Research Workshop, Singapore Management University, 2021-2023

Honors, Scholarships, and Fellowships:

Awards:
Presidential Doctoral Fellowship, Singapore Management University, 2022
Best 1st Year PhD Student Award, Singapore Management University, 2019
2nd Prize in the 25th Beijing Mathematics Competition for College Students, 2014
3rd Prize in the 27th Chinese Mathematical Olympiad in Senior, 2011
Scholarships:
PhD Full Scholarship, Singapore Management University, 2019-2023
China National Scholarship for Graduate Students, 2018
The 1st Class Academic Scholarship, CUEB, 2017
Freshmen Scholarship for Graduate Students, CUEB, 2016

Publications:

"Permutation-based Tests for Discontinuities in Event Studies" (with Federico Bugni and Jia Li) *Quantitative Economics*, 14(1), 2023, 37-70.

"Seemingly Unrelated Regression Estimation for VAR Models with Explosive Roots" (with Ye Chen and Jian Li) *Oxford Bulletin of Economics and Statistics*, 85(1), 2023, 910-937.

Research Papers:

"Uniform Inference for High-Frequency Data" (Job Market Paper)

Abstract: We address the uniform inference problem for high-frequency data that includes prices, volumes, and trading flows. Such data is modeled with a general state-space framework, where latent state process is the corresponding risk indicators, e.g., volatility, price jump,

average order size, and arrival of events. The functional estimators are constructed by collecting localized estimates across different time points. Although the proposed estimators do not admit a functional central limit theorem, a Gaussian strong approximation, or coupling, is established under in-fill asymptotics to facilitate feasible inference. We apply the proposed methodology to distinguish the informative part from the Federal Open Market Committee speeches, and to analyze the impact of social media activities on cryptocurrency markets.

"Optimal Nonparametric Range-Based Volatility Estimation" (with Tim Bollerslev and Jia Li), accepted in *Journal of Econometrics*.
Abstract: We present a general framework for optimal nonparametric spot volatility estimation based on intraday range data, comprised of the first, highest, lowest, and last price over a given time interval. We rely on a decision-theoretic approach together with a coupling-type argument to directly tailor the form of the nonparametric estimator to the specific volatility measure of interest and relevant loss function. The resulting new optimal estimators offer substantial efficiency gains compared to existing commonly used range-based procedures.

Computer Skills:
Python, MATLAB, LaTeX

Languages:
English (fluent), Mandarin (native)