Xize Ye, PhD candidate
Email: xye46@uwo.ca

Curriculum Vitae

Homepage: xizeye.github.io

Education

***PhD** in Statistics, Financial Modelling*, Western University, Canada — Expected Aug 2025

- Supervisors: Marcos Escobar-Anel and Lars Stentoft
- Graduate Affairs Committee (GAC) student representative
- Society of Graduate Students (SOGS) department councillor
- 2023 - 2024 Graduate Student Teaching Award

***MSc** in Statistics, Financial Modelling*, Western University, Canada — 2019 - 2021

- *Thesis*: On the Estimation of Heston-Nandi GARCH Using Returns and/or Options: A Simulation-based Approach

***BMath** in Mathematical Finance*, University of Waterloo, Canada — 2019 - 2021

- Graduated with distinction
- Faculty of Mathematics Entrance Scholarship 2015 - 2019
- University of Waterloo President's Scholarship

Research Areas

Mathematical Finance, Option Pricing, GARCH models, Stochastic Volatility

Manuscripts

[4] Escobar-Anel, M., Stentoft, L. and **Ye, X.** (2024). Analytical Fixed Income Pricing in Discrete-Time: A New Family of Models. *Submitted to Pacific-Basin Finance Journal.*

[3] Escobar-Anel, M., Stentoft, L. and **Ye, X.** (2023). Setting the VIX Free: A Generalized Affine GARCH Model. *Reject and resubmit to The Review of Asset Pricing Studies.*

Publications

[2] Escobar-Anel, M., Stentoft, L. and **Ye, X.** (2024). Not all VIXs are (Informationally) equal: Evidence from affine GARCH option pricing models. *Finance Research Letters*, **69**, 106053.

[1] Escobar-Anel, M., Stentoft, L. and **Ye, X.** (2022). The Benefits of Returns and Options in the Estimation of GARCH Models. A Heston-Nandi GARCH Insight. *Econometrics and Statistics. In press.*

Teaching Experience

Graduate Teaching Assistant, Western University, Canada — 2020 - 2024

- Stats 2141: Applied Probability[1,2]
- Stats 2864: Statistical Programming[1,2,3,*]
- FM 2555: Corporate Finance[1,2,3]
- FM 4521/9521: Advanced Financial Modelling[1,2]
- DS 1000: Data Science Concepts[1,2,3]
- Calc 1301: Calculus II[1,2,*]
- Calc 1000: Calculus I[1,2,*]

Teaching Assistant, University of Waterloo, Canada — 2016 - 2017

- Math 146: Linear Algebra I (Advanced Level)[1]
- Math 137: Calculus I[1]

[1]Duties include office hours (help sessions) and marking assignments.
[2]Duties include marking exams.
[3]Duties include lecture-style teaching (e.g. weekly laboratories, review sessions, problem-solving sessions, lectures, and etc.)
[*]Lead TA

Academic Activities

The 12th Annual Canadian Statistics Student Conference, Memorial University of Newfoundland, Canada 2024

- Presenter. *Title: Generalized Autoregressive Conditionally Stochastic Heteroskedasticity: Motivation and Applications.*

The 4th Department of Statistical and Actuarial Sciences (DSAS) Graduate Colloquium, Western University, Canada 2024

- Chair.

The 2nd Department of Statistical and Actuarial Sciences (DSAS) Graduate Colloquium, Western University, Canada 2023

- Presenter. *Title: Generalized Autoregressive Conditionally Stochastic Heteroskedasticity: Motivation and Applications.*

Fields-CFI-CQAM Industrial Problem-Solving Workshop,The Fields Institute for Research in Mathematical Sciences, Online 2021

- Case study participant. *Project title: Counterparty Credit Risk Migration Indicator.*

The 3rd iCAIR (international Research Centre in Asset Management, Insurance and Risk Management) Seminar, Online 2020

- Presenter. *Title: Affine GARCH option valuation models.*
- Case study participant. *Project title: Deep Hedging.*

More details and presentation slides can be found here.

Personal Development

Training programs in university teaching:

- Western Certificate in University Teaching and Learning, in progress.
- Completed Teaching Mentor Program (TMP) 2024
- Completed Advanced Teaching Program (ATP) 2023

Synchronous workshops and e-learning modules:

- Future Prof Series: Conflict resolution in the Canadian classroom
- Future Prof Series: Talking to your students about generative AI
- Future Prof Series: Universal design learning: multiple means of representation
- Future Prof Series: Classroom management strategies
- Future Prof Series: Preparing to guest lecture
- Western eLearning Series: Facilitating discussions online
- Western eLearning Series: Explaining difficult concepts in science
- Western eLearning Series: Fostering respectful and inclusive online environments
- Western eLearning Series: Accessible online learning

Career Designation:

- Passed Financial Risk Manager (FRM) exam part I

Languages

English (full professional proficiency); Chinese (native)

Last updated: September 15, 2024