

## EDUCATION

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- PhD in Statistical Science**, George Mason University, *Fairfax, VA* Exp. Aug 2025
- *Co-advisors*: Drs. David Kepplinger and Lily Wang
  - *Topic*: Robust parametric and non-parametric methods for linear regression and imaging data
- MS in Statistics**, CUNY-Baruch College, *New York, NY* May 2019
- MS in Finance**, University of Rochester, *Rochester, NY* Dec 2015
- BEcon in Finance**, Zhongnan University of Economics and Law, *Wuhan, China* Jun 2014

## PUBLICATIONS

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### *Published*

1. Z. Li, S. Bruce, C.J. Wutzke, and **Y. Long**, "Conditional adaptive Bayesian spectral analysis of replicated multivariate time series," *Statistics in Medicine*, vol. 40, pp. 1989 – 2005, 2021.
2. D. Feldman\*, S. Gross\*, and **Y. Long\***, "Gender competitiveness and predictability, and prize money in Grand Slam tennis tournaments," *Quarterly Journal of Finance*, vol. 10, No. 2, 2020. (\* denotes equal contribution)

### *Working Paper*

1. **Y. Long**, G. Cao, D. Kepplinger, and L. Wang, "Robust learning and inference for mean functions in functional data analysis of imaging data," In preparation, 2024
2. **Y. Long** and D. Kepplinger, "Illuminant spectrum estimation and inference to study animal coloration from multispectral camera images," In preparation, 2024

## PRESENTATIONS AND ACTIVITIES

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1. **Contributed Talk**, Joint Statistical Meetings, *Portland, OR* Aug 2024  
Illuminant spectrum estimation to study animal coloration from multispectral camera images
2. **Contributed Talk**, ICORS meets DSSV 2024, *Fairfax, VA* Jul 2024  
Robust learning and inference for mean functions in functional data analysis of imaging data
3. **Poster**, The Conference on Evolving Statistical Data Science, *Fairfax, VA* Mar 2023  
Accelerated Algorithms for Elastic Net S-Estimators

## ACADEMIC EXPERIENCE

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- Graduate Research Assistant**, George Mason University, *Fairfax, VA* Aug 2021 – Present
- Develop robust mean function estimation and inference methods for functional data analysis of biomedical images
  - Build efficient non-convex optimization algorithms for computing robust penalized elastic-net estimators
  - Model colors perceived by nonhuman animals using multi-spectral camera images and constrained spline methods
- Graduate Teaching Assistant**, George Mason University, *Fairfax, VA* Jan 2021 – May 2021
- Performed teaching assistant duties for STAT 250 (Undergraduate Introductory Statistics I)
- Graduate Assistant**, Statistical Consulting Laboratory, Baruch College, *New York, NY* Aug 2017 – May 2019
- Collaborated with business school professors on statistical methodology and application projects

- Consulted business school faculty and graduate students about data visualization and statistical software
- Performed teaching assistant duties for STA 9719 (Graduate Statistical Inference), STA 2000, and STA 3154 (Undergraduate Business Statistics I & II)

## PROFESSIONAL EXPERIENCE

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**Summer Associate (Data Scientist)**, Navy Federal Credit Union, *Vienna, VA* May 2024 – Aug 2024

Enhanced credit card probability of default logistic regression models for the CECL quantitative modeling team

- Developed data-driven methods for selecting macroeconomic variables, aligning with model validation standards
- Incorporated pandemic-era data, addressed artificially reduced default rates, and improved back-testing results
- Presented enhancements to Lending Analytics colleagues and executives, providing actionable recommendations

**Quantitative Analyst Intern**, Truist Bank, *Charlotte, NC* Jun 2023 – Aug 2023

Developed machine learning framework with SAS and Python for suspicious transaction monitoring

- Automated data preparation procedures including sampling, cleaning, feature engineering, and exploratory analysis
- Trained tree-based models to predict suspicious activity reports with controlled false positive rates and conducted post-hoc explainability analysis to align model outcomes with business objectives

**Quantitative Research Associate**, Terrapin Asset Management, LLC, *New York, NY* Oct 2015 – Jul 2017

Performed empirical data analysis on hedge fund activism to validate and enhance a new hedge fund strategy

- Back-tested cumulative abnormal returns generated by equity positions of hedge fund activists
- Visualized and communicated findings with portfolio managers to support trading decisions

## SERVICES

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### Volunteer

- ICORS meets DSSV 2024, *Fairfax, VA* Jul 2024
- IMS Meeting of New Researchers in Statistics and Probability, *Fairfax, VA* Aug 2022
- SC21 (ACM/IEEE Supercomputing Conference), *St. Louis, MO* Nov 2021

### Journal Referee

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### University

- **Vice President of Academics** Jun 2021 – Aug 2023  
Statistics Graduate Student Association (SGSA) of George Mason University
- **PhD Representative for Department of Statistics** Aug 2021 – May 2023  
Graduate and Professional Student Association (GAPSA) of George Mason University

## HONORS AND AWARDS

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- **R. Clifton Bailey Travel Awards**, Department of Statistics, George Mason University Aug 2024
- **Graduate Student Travel Fund**, George Mason University Jul 2024
- **Timothy Miller Richman Memorial Scholarship**, Baruch College Jan 2019
- **Merit-Based Scholarship**, Simon Business School, University of Rochester Jul 2014