

# Yang Long

Department of Statistics, George Mason University

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## EDUCATION

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**PhD in Statistical Science**, George Mason University, *Fairfax, VA* Exp. May 2026

- **Advisors:** Dr. David Kepplinger and Dr. Lily Wang
- **Topic:** Robust methods for high-dimensional regression and imaging data analysis

**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

## RESEARCH INTERESTS

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- Robust nonparametric statistics
- Multispectral imaging analysis
- Functional data analysis
- Distributed learning methods
- Non-convex optimization
- Time series analysis

## PUBLICATIONS

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### *Under Review*

1. **Y. Long**, G. Cao, D. Kepplinger, and L. Wang, "Robust mean signal estimation and inference for imaging data," Submitted to *Statistica Sinica*, 2024+

### *Published*

2. 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.
3. 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.

### *Working Paper*

4. **Y. Long**, G. Wang, Z. Gu, D. Kepplinger, and L. Wang, "Robust distributed image-on-scalar regression for spherical surface data," *In preparation*, 2025
5. **Y. Long**, D. Hanley, and D. Kepplinger, "Illuminant spectrum estimation and inference to study animal coloration from multispectral camera images," *In preparation*, 2025

## PRESENTATIONS AND ACTIVITIES

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1. **Invited Talk**, EcoSta 2025, *Virtual* Aug 2025  
Robust distributed image-on-scalar regression for spherical surface data
2. **Contributed Talk**, Joint Statistical Meetings, *Nashville, TN* Aug 2025  
Robust distributed image-on-scalar regression for spherical surface data

3. **Invited Talk**, ICSA Applied Statistics Symposium, *Storrs, CT* Jun 2025  
Robust distributed image-on-scalar regression for spherical surface data
4. **Invited Talk**, StatConnect 2025, *Fairfax, VA* Mar 2025  
Robust learning and inference for mean functions in functional data analysis of imaging data
5. **Contributed Talk**, Joint Statistical Meetings, *Portland, OR* Aug 2024  
Illuminant spectrum estimation to study animal coloration from multispectral camera images
6. **Invited Talk**, ICORS meets DSSV 2024, *Fairfax, VA* Jul 2024  
Robust learning and inference for mean functions in functional data analysis of imaging data
7. **Contributed Poster**, The Conference on Evolving Statistical Data Science, *Fairfax, VA* Mar 2023  
Accelerated Algorithms for Elastic Net S-Estimators

## HONORS & AWARDS

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- **Graduate Student Travel Fund**, George Mason University Jul 2024
- **Academic Excellence Scholarship in MS Statistics (one recipient annually)**, Baruch College Jan 2019
- **Merit-Based Scholarship**, Simon Business School, University of Rochester Jul 2014

## RESEARCH EXPERIENCE

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- Graduate Research Assistant**, George Mason University, *Fairfax, VA* Aug 2021 – Present
- Develop distributed robust estimation and simultaneous inference methods for biomedical imaging data
  - Construct a spectral irradiance estimation and inference pipeline using multi-spectral camera images
  - Build efficient non-convex optimization algorithms for computing robust penalized elastic-net estimators
- Graduate Assistant**, Statistical Consulting Laboratory, Baruch College, *New York, NY* Aug 2017 – May 2019
- Assisted in statistical model development for faculty-led research projects in finance and marketing analytics
  - Consulted business school faculty and graduate students on data visualization and statistical software

## TEACHING EXPERIENCE

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### Teaching Assistant

- **STAT 250: Introductory Statistics I**, George Mason University Spring 2021
- **STA 2000: Business Statistics I**, Baruch College Fall 2017, Spring 2018
- **STA 3154: Business Statistics II**, Baruch College Fall 2017, Fall 2018
- **STA 9719: Foundations of Statistical Inference (Graduate)**, Baruch College Spring 2018

## 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
- Quantitative Analyst Intern**, Truist Bank, *Charlotte, NC* Jun 2023 – Aug 2023
- Developed a machine learning framework with SAS and Python for suspicious transaction monitoring
- 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

SERVICES & LEADERSHIP

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Journal Referee

- Journal of Nonparametric Statistics
- TEST
- Statistical Analysis and Data Mining
- Journal of Applied Statistics: Environmental Statistics and Data Science

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

University

- President/Vice President, Statistics Graduate Student Association (SGSA) of GMU Jun 2021 – Present
- PhD Representative, Graduate and Professional Student Association (GAPSA) of GMU Aug 2021 – May 2023