

YANG LONG

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EDUCATION

PhD in Statistical Science, George Mason University, *Fairfax, VA* GPA: 4.0/4.0 (Passed Qual. Exams) Expected 2025

- Co-advisors: Drs. David Kepplinger and Lily Wang
- Topic: Robust parametric and non-parametric methods for linear regression and imaging data
- Activities: Vice President of Statistics Graduate Student Association at George Mason University

MS in Statistics, CUNY–Baruch College, *New York, NY* GPA: 4.0/4.0 May 2019

- Timothy Miller Richman Memorial Scholarship (Award for best academic performance in graduate statistics program)

MS in Finance, University of Rochester, *Rochester, NY* Dec 2015

BEcon in Finance, Zhongnan University of Economics and Law, *Wuhan, China* Jun 2014

SKILLS

Statistics Statistical Inference, Time Series Analysis, Linear Models, Statistical Learning, Data Visualization

ML Models Logistic Regression, XGBoost, GBM, Random Forest, SVM, Clustering, Deep Learning, Post-Hoc Explainability

Computer R, SAS, Python (scikit-learn, NumPy, Pandas, PyTorch), SQL, C++, MATLAB, AWS, Spark, HPC clusters, Git

PROFESSIONAL/RESEARCH EXPERIENCES

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

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

- Automated data preparation procedures including sampling, cleaning, feature engineering, and exploratory analysis
- Fine-tuned two tree-based machine learning models with customized loss function to predict suspicious activity reports (SAR) while controlling the false positive rate
- Performed post-hoc explainability analysis employing partial dependence plots and feature importance scores, ensuring alignment of model outcomes with business intuition and objectives
- Evaluated model performance via tests of reliability, robustness, and resilience
- Produced comprehensive documentation of the framework to guide and support future modeling endeavors

Graduate Research Assistant, Teaching Assistant, George Mason University, *Fairfax, VA* Jan 2021 – Present

- Develop robust mean function estimation method for imaging data via bivariate penalized splines over triangulation
- 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 estimation
- Develop non-linear time series segmentation method via PCA with martingale difference divergence matrix

Graduate Assistant, Statistical Consulting Laboratory, Baruch College, *New York, NY* Sep 2017 – May 2019

- Provided statistical consulting service to faculty members and graduate students at business school about design of experiments, data visualization, and statistical software
- Assisted students in various statistics courses including graduate business statistics, probability and statistical inference

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

- Back-tested cumulative abnormal returns generated by a newly launched activist hedge fund strategy
- Visualized and communicated findings with portfolio managers and managing directors to support trading decisions

PUBLICATIONS

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. <https://doi.org/10.1002/sim.8884>

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. <https://doi.org/10.1142/S2010139220500068>