KUNBO WANG

Phone: (667) 225-2186
Email: kunbo.wang@jhu.edu

3628 Fords Lane,
Baltimore, MD 21215

EDUCATION

Johns Hopkins University, Baltimore, U.S. Sep. 2017 – Exp May. 2022

Whiting School of Engineering
Ph.D. Candidate in Applied Mathematics and Statistics
Advisor: Yanxun, Xu

Johns Hopkins University, Baltimore, U.S. Sep. 2015 - May. 2017

Whiting School of Engineering
Master of Science in Financial Mathematics

Central University of Finance and Economics, Beijing, China Sep. 2011 - May. 2015

School of Finance
Bachelor of Economics in Financial Engineering

WORK EXPERIENCE

Johns Hopkins University, Baltimore, U.S. Jun. 2016 - Present

Research Assistant

- Research assistant to Professor Yanxun Xu in the Applied Math and Stats Department.
- Major research focuses on developing Bayesian methods for various statistical problems.
- Specifically, on Bayesian tensor regression method, theory and methods on network analysis.
- Statistical applications related to clinic data.

Bank of China International, Beijing, China Summer. 2014

Financial Researcher

- Securitization of microfinance assets (pricing, risk assessment, and stress testing).
- Wrote Matlab code to preprocess assets, calculate cash flows, and do product pricing.

Citibank (China) Co., Ltd., Beijing, China May. 2014 - Jun. 2014

Intern Wealth Planner

- Helped Design comprehensive financial plan based on market trend for VIP clients.

TEACHING EXPERIENCE

Johns Hopkins University, (Applied Mathematics and Statistics)

Mathematics and Statistics Courses:

- Teaching Assistant for Machine Learning
- Teaching Assistant for Network Models in Operations Research
- Teaching Assistant for Introduction to Probability

Programming Courses:

- Instructor for Introduction to R
- Instructor for Introduction to Matlab

Financial Mathematics Courses:

- Teaching Assistant for Introduction to Financial Derivatives
- Teaching Assistant for Interest Rate and Credit Derivatives
- Teaching Assistant for Risk Measurement/Management in Financial Markets
- Teaching Assistant for Quantitative Portfolio Theory and Performance Analysis
- Teaching Assistant for Investment Science

PUBLICATIONS & RESEARCH WORKS

Theoretical and Methodology Works

- **Kunbo Wang**, Yanxun Xu: Bayesian tensor on tensor regression, ready for submission
- **Kunbo Wang**, Fangzheng Xie, Yanxun Xu: Second-order results on optimal Bayesian estimation for stochastic block model, in progress
- Kaining Yang, **Kunbo Wang**, Chen Feng: Finite-sample analysis of iterate averaging method for stochastic approximation with quadratic loss function, In *2017 Conference on Information Sciences and Systems (CISS). IEEE*

Application Works

- Jane A O'Halloran*, **Kunbo Wang***, et al: Start or Switch of Integrase Inhibitors on Depressive Symptoms in Women with HIV, in preparation
- Asante R. Kamkwalala*, **Kunbo Wang***, et al: Symptoms of PTSD Differentially Impacted by "Off-to-On" Integrase Inhibitor Switch in Women with HIV, in progress
- Jane A O'Halloran*, **Kunbo Wang***, et al: Integrase Inhibitor Start or Switch Impacts Learning in Women with HIV, submitted 2019, in preparation

HONORS & AWARDS

- Silver Medal in China National Business Plan Competition — Jan. 2014
- First Prize in China Undergraduate Mathematical Contest in Modeling, — Nov. 2013

SKILLS & QUALIFICATIONS

Computer Skills:

• Proficient in R, Matlab, Python, C++ (Rcpp), LaTeX, Microsoft Excel, SQL

Exams & Certificates:

• Passed EQ, FI, FX and COM exams in Bloomberg Essentials Training Program

• Passed Financial Risk Management (FRM) Exam Part I (all excellent)

Languages:

• Native speaker of Mandarin

• Fluent in English (TOEFL Score: 107/120)

QUANTITATIVE COURSEWORK

Johns Hopkins University, (Applied Mathematics and Statistics)

- Statistical Theory I
- Statistical Theory II
- Statistical Pattern Recognition
- Stochastic Processes
- Monte Carlo Methods
- Stochastic Optimization
- Nonlinear Optimization I
- Nonlinear Optimization II
- Combinatorial Optimization
- Topics in Discrete Optimization
- Probability Theory I
- High-Dimensional Approximation
- Matrix Analysis & Linear Algebra
- Machine Learning
- Advanced Topics in Bayesian Stats

Central University of Finance and Economics

- Real Analysis
- Introduction to Probability
- Introduction to Algorithms
- Introduction to Data Structures
- Numerical Analysis
- Mathematical Statistics
- Functional Analysis
- Advanced Algebra

LEADERSHIP & PROJECTS

Quantitative Trading Strategy Team, China & U.S. May. 2019 - Present

Team Leader

- Extracted, transformed, and loaded data from various sources.
- Created proper criteria to select qualified stocks from CSI 300 (China) stock pool.
- Created trading strategy and trained historical data for optimal parameters.