

TINGHAN (TIRRY) WANG

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EDUCATION

- Expected 12/23 **NEW YORK UNIVERSITY** New York, NY
The Courant Institute of Mathematical Sciences
M.S. in Mathematics in Finance
- **Expected Coursework:** object-oriented programming (Java), penalized regression, decision trees, linear regression, Fama-French, Black-Scholes, stochastic processes, Hull-White model
- 09/18 - 07/22 **SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY** Shenzhen, China
B.S. in Mathematics and Applied Mathematics
- **Coursework:** calculus, linear algebra, ordinary and partial differential equations, real analysis, probability, hypothesis testing, Markov chain, Black-Scholes-Merton, time series analysis, econometrics, programming in C/C++, Java, data structures
 - **Award:** First Prize Scholarship (top 5% in college)

EXPERIENCE

- 07/20 - 08/20 **SINOLINK SECURITIES** Chengdu, China
Settlement Officer Intern
- Collected data daily on customer margins, net transfer of bank securities accounts, and total number of transactions; generated charts for management's review and monitoring
 - Inspected settlement statements from Shanghai Stock Exchange
 - Compiled intraday securities delivery list

PROJECTS

- 04/22 - 05/22 **SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY** Shenzhen, China
Financial Crash Forecasting Using LPPL (Python)
- Retrieved monthly Shanghai Composite Index data and implemented log-periodic power law (LPPL) model
 - Applied generic algorithm to estimate model parameters based on data collected; forecasted date of Shanghai stock market's next crash
 - Assessed LPPL model and identified sources of possible inaccuracies
- 11/21 - 12/21 **Matrix Multiplication and Convolutional Neural Network (C++)**
- Implemented standard matrix multiplication and Strassen's algorithm; theoretically proved time complexity of both
 - Established that below a certain threshold, one method was more efficient than the other; analyzed influencing factors for evaluating threshold (e.g., multithreading, matrix properties)
 - Parsed images using OpenCV; implemented convolutional neural network (CNN) model
- 07/21 - 08/21 **NORTH CAROLINA STATE UNIVERSITY** Raleigh, NC
Computational and Financial Mathematics and Simulations (Java)
- Implemented least-squares Monte Carlo simulation and finite difference method on valuation of American options
 - Applied weighted least squares to decrease estimation bias, and used forward Monte Carlo simulation to improve computational speed
 - Compared accuracy and computational speed of enhanced methods with traditional ones

COMPUTATIONAL SKILLS / OTHER

Programming Languages: Java, C/C++, R, MATLAB, Python

Languages: English (fluent); Mandarin (native)

Interests: Badminton (captain of varsity team; Guangdong Badminton Championships, 2nd place in men's singles)