

YINGFENG (KATHERINE) WANG

(510) 899-0182 ■ yingfeng.wang@nyu.edu ■ linkedin.com/in/yingfeng-wang

EDUCATION

NEW YORK UNIVERSITY New York, NY

The Courant Institute of Mathematical Sciences

MS in Mathematics in Finance (Sep. 2020 - expected Dec. 2021)

- **Coursework:** Ito lemma, geometric Brownian motion, Martingale, principal component analysis, singular value decomposition, Black-Sholes formula, Value at Risk

UNIVERSITY OF SCIENCE AND TECHNOLOGY BEIJING Beijing, China

BEC in Financial Engineering (Sep. 2016 - Jun. 2020)

UNIVERSITY OF CALIFORNIA, BERKELEY Berkeley, CA

Global Exchange Program (Sep. 2018 - Dec. 2018)

- **Coursework:** calculus-based probability, numerical integration, Newton's method, Taylor series, Lagrange interpolating polynomials, business communication skills
- **Awards:** First-class Scholarship given to top 1% of students in major

EXPERIENCE

GLOBAL RISK MANAGEMENT ADVISORS INC New York, NY

Quantitative Analyst Intern (Jul. 2021 - Aug. 2021)

- Performed market risk analysis, risk attribution analysis and performance analysis
- Validated risk and performance report, checked, calculated and updated data and formula
- Updated quarterly market commentary report of public equity and fixed income sections

FINTECH STARTUP (STEALTH MODE) New York, NY

Quantitative Analyst Intern (May. 2021 - Jun. 2021)

- Implemented dimension reduction methods to multidimensional stock data for data preparation
- Built multiple clustering models on stock data and produced visualization of clustering results
- Performed statistical and characteristic analysis based on different clusters of stocks

PROJECTS

NEW YORK UNIVERSITY New York, NY

FX Volatility Smile Construction - Python (Apr. 2020 - May. 2020)

- Calibrated SABR model on market data of USDBRL using Hagan et. al. approximation
- Created graph of implied volatility vs. strike between put delta of -10% and call delta of 10%

Stock-based Contract Pricing - Python (Nov. 2020 - Dec. 2020)

- Constructed Hull-White short rate model and geometric Brownian motion stock price model
- Implemented two-factor Monte Carlo simulation to simulate stock price, calculate LIBOR forward rate according to affine term structure, compute payoff and discount it after each simulation
- Computed the average of results of 10000 times simulations as contract price

Volatility Spillover of RMB Exchange Rate to BRICS - Python (Feb. 2020 - Jun. 2020)

- Constructed spillover index model by building VAR framework and implementing forecast error variance decomposition method to measure directional shock between currencies
- Computed RMB exchange rate spillover index with highest RMB volatility spillover effect to Russian Ruble 58.89% and lowest to South African Rand 18.99%

COMPUTER SKILLS & OTHER

- **Programming Languages:** Python (pandas, numpy, sklearn), MATLAB, Refinitiv Eikon
- **Languages:** English (fluent), Mandarin (native)