

XINQIAO (RINSTER) TONG

(929) 777-0935 // xinqiao.tong@nyu.edu // [linkedin.com/in/xinqiao-rinster-tong/](https://www.linkedin.com/in/xinqiao-rinster-tong/)

EDUCATION

- Expected 12/24 **NEW YORK UNIVERSITY** New York, NY
The Courant Institute of Mathematical Sciences
M.S. in Mathematics in Finance
- **Coursework:** financial computing in Python, stochastic calculus, derivatives valuation, penalized regression, data-driven modeling, portfolio optimization and risk
- 09/19 - 06/23 **XI'AN JIAOTONG-LIVERPOOL UNIVERSITY** Suzhou, China
B.S. in Applied Mathematics
- **Coursework:** analysis, probability & statistics, ODE & PDE, mathematical modeling, operational research, numerical analysis, risk management, Markov chain, optimization
 - **Honors/Awards:** Best Overall Academic Performance Award; Rajendra Bhansali Prize
 - **Thesis:** Kou's Jump Diffusion Model for Option Pricing

EXPERIENCE

- 06/22 - 09/22 **RUISHENG INVESTMENT (\$50M AUM)** Qingdao, China
Quantitative Research Intern (Python, MATLAB)
- Designed sell put strategy based on VIX, Greeks and return-risk ratio, attaining 8.7% annual return, 3.5% maximum drawdown and 90.3% winning rate
 - Analyzed hedging with ratio and calendar spread based on support levels, with 2:1 ratio spread achieving 8.9% annual return, 3.0% maximum drawdown and 83.9% winning rate
 - Selected combinations of moving averages and commodities at daily level for CTA strategy, which realized 15.7% annual return and 4.9% maximum drawdown
 - Performed grid trades on 3 individual stocks (grid width 1%) after training
- 06/22 - 11/22 **PURDUE UNIVERSITY** Remote
Research Assistant (Python)
- Tested sparsified DNN based on Bayesian analysis to recognize pivotal factors
 - Implemented LassoNet to select factors; refitted DNN to evaluate significance of chosen factors based on portfolio's monthly return and Sharpe ratio
 - Discovered that top 5 factors explained 90% of return generated by all 63 factors

PROJECTS

- 09/22 - 06/23 **XI'AN JIAOTONG-LIVERPOOL UNIVERSITY** Suzhou, China
Kou's Jump Diffusion Model for Option Pricing (MATLAB)
- Derived pricing formula step by step and verified leptokurtic feature of returns
 - Performed parameter estimation to calibrate Black-Scholes' and Kou's models against real-world data of options on S&P 500 via fixing time to maturity and fixing option contract
 - Reduced prediction errors by 50.3%, on average, under Kou's model when fixing option contract
- 04/21 - 09/21 **XI'AN JIAOTONG-LIVERPOOL UNIVERSITY** Suzhou, China
Subsurface Flow Simulation via Machine Learning (Python)
- Implemented physics-informed neural network (PINN) to solve Laplacian equation with Dirichlet boundary conditions numerically
 - Investigated scenarios with regular blocks and irregular cracks, in which Laplacian coefficients were heterogeneous within computational domain

COMPUTATIONAL SKILLS / OTHER

Programming Languages: Python, MATLAB, SQL, Java

Languages: English (fluent), Mandarin (native)

Honors & Awards: National Scholarship in 2022, Provincial Outstanding Student in 2022, Meritorious Winner in Interdisciplinary Contest in Modeling in 2021