YIFAN SHEN
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EDUCATION

NEW YORK UNIVERSITY New York, NY
The Courant Institute of Mathematical Sciences
M.S. in Mathematics in Finance (expected December 2022)

- ***Coursework:*** Risk and portfolio management, Financial security and market, Computing in finance, Stochastic calculus, Data science and Data-driven modeling
- ***Future Coursework:*** Data science in quantitative finance, Fixed income derivatives: model & strategies in practice, Scientific computing for finance, Active portfolio management

MCGILL UNIVERSITY Montreal, Canada
B.S. in Honours Applied Mathematics (June 2021)

- ***Coursework:*** Applied regression, Differential equations, Statistics, Advanced calculus, Applied linear algebra, Numerical analysis, Complex variables
- ***Awards:*** First class honours in applied mathematics

EXPERIENCE

WECHAT PAY, TENCENT Shenzhen, China
Data Analyst and Product Manager Intern (June 2019-August 2019)

- Utilised R to simulate 2000+ data point to formulate a new model and projected transaction volume decline with applying withdraw fee
- Optimized two factors in current ARMA model in R to reduce error and read a more precise prediction of sum of payment
- Performed full-cycle data analysis of 5 different types of business by using python and to improve daily active users from 250 thousand to 1 million in 3 months

PINGAN TRUST Shanghai, China
Real Estate Investment Manager Intern (June 2018-July 2018)

- Utilized Python to research land price of Gopher Center over a five-year period to understand its growth pattern and predict potential rent increase
- Streamlined the process of collecting tenant-level data and investigated rent and occupancy impact on property financials and asset appreciation

PROJECTS

MCGILL UNIVERSITY Montreal, Canada
Copulas and Concordance Signatures in Quantitative Risk Management (September 2020)

- Drived a kendall's tau rank correlation method to estimate attainable concordance signature
- Applied three different copulas by using R to fit 4000+ data based on log return of stocks and generated attainable ranges of rank correlation between any two stocks
- Utilized extremal copulas to investigate impact of financial crisis on mortgage default rate

Nonlinear Dynamics and Bifurcation Theory Application in Asset Pricing Model (September 2019)

- Establish an adaptive beliefs system of asset pricing model and constructed dynamics based on four different groups of traders to predict their strategy towards future price change
- Analysed variation trend of established dynamics influenced by external force including government intervention, economic downturn and bull news

COMPUTATIONAL SKILLS/OTHER

Programming Languages: Java, R , MATLAB, Python, C/C++
Languages: Chinese (Native), English (fluent), French (Basic)
Interests: Swimming, Cycling