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EDUCATION

Columbia University, Department of Mathematics   New York, NY
MA in Mathematics of Finance   *Expected Dec. 2017*
- Coursework: Risk Management, Linear Regression, Time Series, Stochastic Process, Mathematics of Finance

Xiamen University, School of Mathematical Sciences (*Graduate with Honors*)   Xiamen, China
BS in Computational Mathematics (Major GPA:3.82/4.00)   *June 2016*
- Coursework: Data Structure & Algorithms, Numerical Analysis, Numerical Methods for PDE, Mathematical Modeling

College of Charleston   Charleston, SC
Fall Exchange Sponsored by China Scholarship Council (GPA: 4.00/4.00)   *Aug.-Dec. 2015*

University of California, Los Angeles   Los Angeles, CA
Summer Exchange (GPA: 4.00/4.00)   *June-Aug. 2014*

WORK EXPERIENCE

Dalian King-hedger Commodity Trading Co., LTD   Dalian, China
Quantitative Research Intern, Department of Corn and Soybean   *July-Aug. 2016*
- Sourced and visualized historical price of Corn Futures and Soybean Futures from Chicago Board of Trade (CBOT); processed the data of price movement with packages of NumPy and pandas in Python
- Developed regression models and cointegration model to analyze correlation between historical price of Corn Futures from Dalian Commodity Exchange (DCE) and Chicago Board of Trade (CBOT) and compared models' performance
- Assisted in fundamental analysis of corn and soybean markets by creating and analyzing balance sheet according to monthly data from United States Department of Agriculture in Excel; results employed by trading desk

Dalian Commodity Exchange   Dalian, China
Intern Analyst, Department of Agricultural Products   *Jan.-Feb. 2016*
- Investigated three delivery locations of egg and soybean; surveyed five companies and participated in amendment of future contracts including adjusting premiums & discounts and adding new delivery locations
- Tracked Blockboard and Fiberboard markets, monitored daily transaction records and responsible for risk alerting
- Focused on notable circuit breakers events to analyze the adaption of circuit breaker policy for China futures market

PROJECT EXPERIENCE

Pairs Trading Strategy Using Dow Jones Industrial Average (R), *Columbia University*   Fall 2016
- Developed a pairs trading strategy combined minimum distance method with cointegration model, gained annualized return of 13.75% and Sharpe Ratio of 0.89 according to back-test results in three years based on historical stock prices
- Employed minimum distance method to find five pairs of stocks with minimum 'distance' among 30 components of DJI
- Conducted cointegration test on log price of five pairs of stocks by employing Dickey-Fuller test, estimated trading triggers in two-year training period and back-tested the performance of the trading strategy in one-year trading period

Portfolio Optimizer Using Time Series (R), *Columbia University*   Fall 2016
- Estimated statistical characteristics of the log-returns of 100 stocks in last 16 years by using rolling windows
- Conducted portfolio optimizers to find maximum Sharpe Ratio under time series models- IID model and AR model were employed to fit return while GARCH and OHLC estimator were employed to fit volatility under rolling windows
- Back-tested portfolio optimizers by using historical data and compared performances of optimizers

Value at Risk (VaR) & Expected Shortfall (ES) Calculation System (MATLAB), *Columbia University*   Fall 2016
- Developed interactive VaR & ES calculation system for portfolio of stocks and options under multiple window lengths
- Implemented Monte Carlo, parametric and historical methods calculating VaR & ES and compared their performances
- Back-tested computed results against historical stock prices and implied volatility of options under real world scenarios

ADDITIONAL INFORMATION

Computer Skills: MATLAB, C, Python, R, LaTeX, Excel, VBA, Bloomberg Terminal
Interests: Top-level amateur clarinet player, Poker, Cue sports, Music, NBA