LEON (YANG) LI

(347) 366-1046
yl3018@columbia.edu
cn.linkedin.com/pub/yang-li/76/476/576

EDUCATION

Columbia University **New York, NY**
Engineering School, Industrial Engineering and Operations Research Department *Aug 2013 – Dec 2014*
M.S. in Operations Research GPA: 3.6/4.0
Courses: Stochastic Processes, Stochastic Calculus, Optimization, Simulation, Asset Allocation, Term Structure, Capital Market Investment, Application Programming, Machine Learning, Computational Methods in Derivatives Pricing, Algorithm Trading, Algorithms, Data Structure, Time Series Analysis

Beijing University of Aeronautics and Astronautics (Beihang University) **Beijing, CN**
School of Automation Science and Electrical Engineering *Sep 2009 – Jul 2013*
B.E. in Automation Science, **B.S. in Applied Mathematics** GPA: 3.7/4.0

EXPERIENCES

Thasos Group **New York, NY**
Researcher; (Python, SVN, Excel/VBA) *Feb 2015 – Jun 2015*
- Maintained and improved the firm's big data software system and production level back-testing system, participated in equity research and contributed useful add-on features to generate more stable and predictive trading signals
- Built an accounting system to calculate realized/unrealized p&l and many other statistics on both portfolio level and single trade level, adjusted the result for wash sale and matched it with the broker's records
- Built a Bloomberg Excel tool to gather fundamental information such as release date, EPS, same store sales, revenue, etc

Applied Academics, LLC **New York, NY**
Quantitative Analyst Intern; (MATLAB, R) *Sep 2014 – Dec 2014*
- Participated in developing a systematic multi-testing framework to evaluate the performance of trading strategies
- Researched an unique momentum trading indicator in-depth and improved it to make it applicable to different scenarios

Oasys Capital Management, LLC **New York, NY**
Portfolio Analyst Intern; (Python, SQL) *Jun 2014 – Aug 2014*
- Gathered stock and fundamental information from compustat and constructed customized local database for research use
- Built a polynomial multi-factor model and a normal distribution transform to estimate stock covariance matrix and return
- Optimized stock portfolio with constrained Mean Variance and Robust CVaR methods, based on which built a back testing environment using past 15 years' data, and also developed a hedging strategy to avoid sector and market capitalization risks

Quantitative Finance Course Projects at Columbia **New York, NY**
Student; (C++, MATLAB, Excel/VBA, SQL) *Sep 2013 – Jun 2014*
- Priced different types of stock options using numerical methods including Fast Fourier Transform, fractional Fast Fourier Transform, COS method, Partial Differential Equations and Monte Carlo Simulation
- Calibrated Hull-White, Heston and VGSA stochastic volatility models with Genetic Algorithm, generated the call price surfaces and implied volatility surfaces, and also priced call options with local volatility surfaces and simulation techniques
- Implemented Machine Learning algorithms like Regression, Classification, Kernels, Gradient Descend, Neural Network, Maximum Likelihood Estimation, Probability Inference, Expectation Maximization, SVM, and Hidden Markov Model
- Allocated asset portfolios using PCA factor model, VaR analysis and Mean Variance optimization method
- Build a linear programming system to detect the hidden arbitrage opportunities among several S&P500 index options

UC Berkeley Fuzzy Mathematics Laboratory **Berkeley, CA**
Visiting Student; *Jul 2012 – Oct 2012*
- Studied the defects of conventional Utility Theory in determining investor's risk attitudes
- Adjusted the theories in Behavioral Economics with Fuzzy Mathematics and produced two special risk-tolerance models
- Designed a new risk attitude measurement by combining the two models in a two-step classification schema

OTHERS

Skills: Bloomberg, Linux, Python, C++/C, MATLAB, SQL, Excel/VBA, R
Publication: A Fuzzy Risk Attitude Classification Based on Prospect Theory (IEEExplore included)
Awards: Excellent Student of Comprehensive Quality (top 5%, twice); Outstanding Student Leader Award (3 times); Science and Technology Scholarship; Excellent Academic Performance Scholarship; Honorable Mention in MCM2012