Xianxin Wang (Steven)

New York, NY 10001

CFA Level 3 Candidate

http://stevenwang.trade/

EDUCATION

Boston University *M.S. Mathematical Finance* 2017

- Relevant Courses: Statistical Methods, Computational Finance, Data Analysis and Empirical Methods, Stochastic Calculus, Portfolio Management, Advanced Derivative, Credit Risk, Fixed Income Securities, C++, Data Structure

Fudan University, China B.A. International Finance 2015

- 2013 National Mathematics Modeling Competition(CUMCM) 1st Prize
- 2011 People's Scholarship & 2011 Outstanding Award of Students' Union

PROJECTS

Automated Arbitrage Program in Bitcoin Markets (Python) 2016

- Found and exploited a triangular arbitrage opportunity with automated trading scripts deployed on AWS
- The trading scripts communicate with the trading platform by RESTful API and JSON API

Analysis of equity returns with multifactor model (Python & SQL) 2016

- Approached with Fama-French 3-factor model and necessary statistical tests with data managed by MySQL
- Extended the analysis with synthetic factor of Google Trends index (an indicator of search-volume)

Pricing Swaption based on Term Structure with Nelson Siegel Model (Mathematica) 2016

- Considered both equally-weighted and duration-weighted scenarios

Pricing Asian Options under Markov Processes (MATLAB), Boston University 2016

- Computed prices for both continuously monitored and discretely monitored Asian options
- Implemented Euler discretization to improve computational efficiency

Coding Projects of Financial applications (C++), Boston University 2015

- Derived Black-Litterman Efficient Frontier by solving the matrix calculations with "Eigen" library
- Achieved Black-Scholes option pricing tool with calculations of the Greeks for vanilla Call and Put Options
- Simulated exchange orderbook system with order information I/O and execution according to price-time priority

EXPERIENCE

Analyst, OmniMarkets, New York (Internship) 2017

- Built XVA(CVA/DVA) model for OTC derivatives (C#, Provided documentation)
- Built PCA framework to reduce dimensionality of risk factors for stress testing package (C#, documentation)
- Constructed a market capitalization weighted index of cryptocurrencies with divisor adjustment (python, C#, document)
  - Collected and cleaned data of various cryptocurrencies' trading prices and set up a database (Linux)
  - Calculated risk metrics (VaR, Rolling Volatility, Max Drawdown) for the index and compared them against SPDR ETFs (SP, BNDS, GLD, XLE) with statistical visualization (python).

Rotman International Trading Competition (RITC), Toronto 2016

- Achieved fully automated high-frequency trading algorithm exploiting bid-ask spread and mean-reverting strategy
  - Exploited order queuing and order book system of the trading server by smart order management (MATLAB)
  - Achieved simple algorithm of market scenario recognition
- Reduced risk exposure by position-balancing strategy and accomplished algorithm for clearing exposed positions

CME Group Trading Challenge 2016

- Traded commodity futures with a focus on crude oil and gold, with P&L 48% (Ranked No.8 worldwide)

Global Financial Analyst, Rothschild, Beijing, China (Internship) 2014

- Provided support for enterprise valuation models based on analysis of comparable companies
- Researched the Chinese high-speed railway and mining industry for possible M&A opportunities
- Created company profiles with financial highlights for management reference

Investment Analyst, Standard Chartered Bank, Shanghai, China (Internship) 2014

- Traced back-test results using historical simulation and Markowitz theory with Bloomberg Terminal
- Designed spreadsheet to evaluate all the Investment Advisers' performance in China based on performance indicators

Auditor, KPMG Elite Program, Shanghai, China (Internship with return offer) 2013-2014

- Received professional auditing training in auditing procedures and risk control system
- Performed complete on-field auditing procedure with professional auditing team and made draft working papers

SKILLS & INTERESTS

- Python, C++, SQL, R, C#, MATLAB, Linux, bash, Regex, VBA, Machine Learning, TensorFlow, AWS
- OLS, GLS, GARCH, Regression Analysis, VaR, Statistical and Financial Modeling, Monte Carlo Simulation, OU & CIR process, Nelson Siegel Model, SABR, Multifactor models, Black Scholes, Derivative Pricing
- Reading, Basketball, Trading & Automated Trading, Technology & Electronics, Cryptocurrency (Bitcoin)