Tel: (917) 770-9024 Email: zy2260@columbia.edu

EDUCATION

Columbia University in the City of New York

New York, NY

MA in Mathematics of Finance (Sept. 2016 – Dec. 2017, expected)

- Courses: Time Series Modeling (ARMA, ARCH/GARCH), Stochastic Calculus (martingale & stopping time theory), Programming for Quant (C++), Numerical Methods for Finance (VBA, Cubic Spline, etc.), Statistical Methods (R), Stochastic Methods (optimal stopping problems), Fixed Income PM (RM, Bloomberg)
- Fixed Income PM Project, Supervisor: Rosanna Brizio, Head of FI, Intesa Sanpaolo Bank (Sept.—Dec. 2016): Managed a bond portfolio under risk restrictions, hedged the portfolio with swaps and futures, rebalanced using

strategies and bets on market and gained profit of 0.86% within two and a half months.

VIX Trading Strategy Project, Supervisor: Prof. Mikhail Smirnov (Dec. 2016)

Designed an everyday-rebalancing VIX strategy to signal excessive fear or greed in the stock and commodity market, the cumulative returns of which outperformed benchmarks 6.5% and 21% annually in our back test.

Tsinghua University (Graduate with Honors)

Beijing, China

BS in Mathematics and Applied Mathematics (Double Major, Sept. 2013 – Jul. 2016) (GPA: 85.5/100)

BS in Built Environment and Equipment Engineering (Aug. 2012 – Jul. 2016) (GPA: 89.4/100)

- Courses: Probability Theory, Statistical Inference (R), Linear Regression, Numerical Methods, Real Analysis, Complex Analysis, Ordinary Differential Equations and Partial Differential Equations.
- Tsinghua University Scholarship of Academic Excellence (**top 5%**, 2013, 2014), Regional Outstanding for High School Mathematical Contest in Modeling (**HiMCM** 2011), Honorable Mention for **MCM** (2015)

SKILLS

Programming & Software: Matlab, R, Python, C++, VBA, Java, LaTeX, Excel, PPT, Bloomberg Terminal

Certificate: CFA Level I Candidate

Interest: Swimming, Travelling, Violin, Japanese Culture, Ancient Chinese Poem

PROFESSIONAL EXPERIENCE

Beijing Caigin Information Technology Company Ltd. (Java)

Beijing, China

Quantitative Strategy Analyst, Part-time Intern (Sept. 2015 – Feb. 2016)

- Modeled the random distribution of the prices of sample stocks and ETFs, including evaluating systematic risk of an asset portfolio by matrix analysis using Java.
- Backtested a multi-factor asset allocation optimization model by simulating cumulative yields.

DV Trading, LLC. (C++)

New York, NY

Assistant Research Intern; Supervisor: Ali Hirsa (Feb. 2017 – May 2017)

• (Expect to) build and test a model concerning the relative impact of the trading of one asset on another (In progess)

PROJECTS

Optimization of the Control and Treatment of Ebola Virus (2015 MCM/ICM Contest) (Matlab)

Optimize through four systems (disease spread prediction, drug production, virus allocation and drug delivery).

A New Recognition Algorithm for Household Appliance Based on the Bayes Classification (Matlab)

• Invented independently a new algorithm based on Bayes classification and feature extraction of occupant behavior.

An Application of Artificial Neural Network in Heat, Ventilation and Air Conditioning (HVAC) (Matlab & Simulink)

• Designed an artificial neural network algorithm along with a relative heating model to control a room's temperature to a certain range with high precision as quickly as possible.