# **ZHENGXU (ANDREW) LI**

(646) 821-5814 ■ zhengxu.li@nyu.edu ■ linkedin.com/in/zhengxu-li

#### **EDUCATION**

#### NEW YORK UNIVERSITY

The Courant Institute of Mathematical Sciences

MS in Mathematics in Finance (Sept. 2019 – Jan. 2021) GPA: 3.8/4.0

Coursework: derivative pricing, Black-Scholes, stochastic processes, Greeks, CAPM, Fama-French, mean-variance optimization, Monte Carlo, OOP, applications of big data to finance

#### **NEW YORK UNIVERSITY**

- BA in Mathematics and Computer Science (Sept. 2014 May 2018) GPA: 3.9/4.0
  - *Coursework:* probability, statistics, calculus, linear algebra, ODEs, data structures and algorithms
  - *Honors:* Phi Beta Kappa, Magna Cum Laude

### **EXPERIENCE**

## HUATAI SECURITIES

Hong Kong, China (Remote) Equity Derivatives Department Intern (Quantitative Research) (Jan. 2021 – Feb. 2021)

- Developed and implemented Monte Carlo and PDE Finite Difference pricing models for snowball autocallable in Python; calculated and compared price, delta, gamma, and vega from the two models
- Scripted Python tools to automatically compare trade confirmations and calculate cash flows •

# JENNISON ASSOCIATES, LLC (AUM: \$203.7 Billion)

Custom Solutions Group Intern (Quantitative Research) (June 2020 – Aug. 2020)

- Conducted literature review; constructed and implemented statistical analysis in R of large-cap fundamental growth mutual funds' herding effects on stock returns
- Designed metrics to measure popularity of a stock among large-cap mutual funds; built models to select potentially top-performing stocks based on defined metrics; analysis showed models successfully picked stocks with better future returns
- Implemented stock prices and held shares adjustments based on Compustat stock split rates in R •
- Summarized Lipper fund classification methodology; checked Lipper fund holding data consistency

## PLUSPLUS CAPITAL MANAGEMENT

### Quantitative Research Intern (June 2018 – July 2018)

- Conducted statistical analysis in R and Excel to investigate effectiveness of metrics (Sharpe ratio, Calmar ratio, max drawdown) as predictors of funds' future performance; analysis showed the ratio (worst-month return : best-month return) best identifies potential graveyard funds
- Proposed a procedure for Fund of Funds to select hedge funds with good future performance New York, NY

### **NEW YORK UNIVERSITY**

## Summer Researcher, Advisor: Prof. Robert V. Kohn (May 2017 – Sept. 2017)

- Investigated calibration of Ross Recovery Theorem; published a 20-page paper in SIURO
- Key contribution: reduced noise by reformulating optimization problems in existing mathematical model; implemented new model in MATLAB and conducted robustness test
- Examined effectiveness of the theorem by analyzing expectations, skewness, and correlations of the SPX index distributions and by back testing theorem-based trading strategy optimizing log-return
- Processed market data from Bloomberg, such as S&P 500 futures, options, and Treasury yields **CISDI ENGINEERING CO., LTD.** Chongqing, China

## Technology Summer Intern (June 2016 – Aug. 2016)

- Contributed to model-view-controller structure by adding data query-and-summary function in Java
- Offered advice for service enhancement by conducting statistical analysis of user data in Excel •

## PROJECT

# *Quantitative Futures Trading Strategy* (Jan. 2019 – Apr. 2019)

Implemented futures trading strategy based on Bollinger bands and MACD (36% annualized return)

## **COMPUTER SKILLS/OTHER**

New York, NY

New York. NY

New York, NY

Jersey City, NJ