# **Zhihong (Leven) Chen**

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### **EDUCATION**

Columbia University, Department of Mathematics

New York, NY

Master of Arts in Mathematics of Finance (GRE Quantitative: 170/170)

Expected Dec. 2017

• **Coursework**: Introduction to the Mathematics of Finance, Stochastic Calculus, Time-Series, Hedge Fund Strategies, Advanced Programming (C, C++), Machine Learning, Numerical Methods, C++ Programming for Quants, Stochastic Methods

Sun Yat-sen University, School of Math & Comp Science, Lingnan College

Guangzhou, China

Bachelor of Science in Applied Mathematics (Major, GPA: 3.8/4.0) and Finance (Minor, GPA: 3.7/4.0)

Sept. 2012 - Jun. 2016

- Coursework: Stochastic Processes, Probability, C++, Mathematical Statistics, Data Structure & Algorithms, Data Mining
- **Honors**: Merit-Based Scholarship (Top 5%); Honorable Mention Awards in US Mathematical Contest in Modeling; Third Prize in China's Mathematical Contest in Modeling

University of California, Berkeley, School of Public Health

Berkeley, CA

Biostatistics (Summer Session, GPA: 4.0/4.0)

Jul. - Aug. 2015

### PROFESSIONAL EXPERIENCE

LMG Capital LLC

New York, NY

Fall Intern, Quantitative Developer

Oct. 2016 - Present

- Constructed a *Python* live parser to automatically scrape market data from websites, cleaned and stored gigabytes of unstructured text data to *MySQL* database; optimized portfolio construction and trading strategies based on back-testing
- Developed a monitor system on Amazon Web Service EC2 platform for "event driven" strategies to detect trading signals and to automatically send alerts with well-designed emails in *Python*.

# Yuexiu Industrial Investment Fund Management Co., LTD

Guangzhou, China

Summer Analyst, Quantitative Researcher

Sept. 2015 - Apr. 2016

- Established an integrated automatic trading system for Structured Fund Discount Arbitrage Strategy to trade in the real world (package: pandas, numpy, requests, easytrader, pymssql, matplotlib), which includes mock trading, hedging, database construction and update, arbitrage signal monitoring, strategy execution and profits calculation.
- Collaborated with trading team in designing and validating trading models; built an option-volatility strategy using implied volatility and BS model, programmed a commodity paired trading strategy based on cointegration and VECM.
- Developed an automatic web trading API for automatic trading in *Python* and incorporated monitor systems into an online platform (webpage) that visualizes real-time indicators of different assets by Django to help traders identify arbitrage signal.

#### **Chubb Life Insurance Hong Kong Limited**

Hong Kong

Summer Analyst, Investment Intern

Jul. - Aug. 2014

- Matched Excel files to retrieved tick-level data using regular expression in *Python*, transformed the data into minute-level data for over 24 commodities and constructed a database platform in *SQL Server*, serving the trading team as a data source for back-testing of commodity related strategies.
- Provided daily analytical report on the effects of global macroeconomic events on the firm's business.
- Prepared investment risk tolerance tests for over 100 customers, evaluated the results and provided feedback to the department to tailor specific portfolio for customers.

### PROJECT EXPERIENCE

# Commodity Futures Paired Trading Based on Cointegration and Vector Error Correction Model

Dec. 2015 - Apr. 2016

- Constructed a database for Chinese commodity futures, screened pairs for trading based on trading volume and correlation.
- Built VECM in *Python* and *R* (package: pandas, rpy2, statsmodels) by applying ADF unit root test, Johanson cointegration test, residual test and Granger Causality test to commodity pairs, designed and back-tested the strategy using data from 2012 to 2015.

# **SKILLS & HOBBIES**

- Computer Skills: Python, C/C++, R, MATLAB, SQL Server, MySQL, VBA, Linux, Web Scraping
- Hobbies: Guitar, Snooker, Basketball, Tennis, and Running