

RUNKUN (VINCENT) XIE

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EDUCATION

Columbia University, New York, NY Expected Dec 2019

- *MA in Mathematics of Finance*, GPA: 4.00/4.33
- Coursework: Stochastic Calculus, Numerical Analysis, Non-linear Option Pricing, Time-Series Modeling; Deep Learning, Signal Processing, Database, Algorithm Analysis; Financial Risk Management, Fixed Income Portfolio Management
- Quantitative Analyst at Columbia Quant Group

Central University of Finance and Economics (CUFE), Beijing Jun 2018

- *BE in Financial Engineering*, GPA: 3.87/4.00, top 10%
- Coursework: Probability and Statistics, ODE/PDE, Real Analysis; Machine Learning, Algorithm and Data Structure, C++ Programming; Risk Management, Finance, Accounting, Derivatives Pricing, Investment, Econometrics, Macroeconomics

University of Michigan, Ann Arbor, MI Aug 2016

- *Summer Program in Quantitative Methods of Social Research*, GPA: 4.00/4.00
- Coursework: Advanced Time Series Analysis, Simultaneous Equation Models, Regression Analysis

EXPERIENCE

Huatai Securities (Top 4 Investment Bank in China) Jun 2019 – Aug 2019

Quantitative Research Intern Beijing

- Strategy Implementation: implemented cyclical asset allocation strategy (strategy id on Wind Terminal: MACRO.WI)
- Technical Overview: extracted cyclical information from asset signals by Gaussian Filter and Fourier Transform, synthesized asset signals and generated cycle factors on certain frequencies using SUMPLE algorithm
- Strategy Development: researched on papers, modified the strategy, and improved its Sharpe Ratio from 1.44 to 1.86
- Quant Modeling: applied Random Forest and other Machine Learning techniques to the asset allocation strategy, estimated the non-linear relationship between asset year-on-year return and cycle factors, and increased prediction accuracy by 5%

China Galaxy Securities (Top 10 Investment Bank in China) Feb 2018 – Jun 2018

Quantitative Research Intern Beijing

- Quant Development: implemented a matrix-based backtest system for alpha exploration and multi-factor models by Python
- Strategy Implementation: built the Barra model, backtested multi-factor strategies, and achieved 1.39 Sharpe Ratio
- Alpha Research: Interacted with SQL Database, tested short- and medium-term alphas in “101 Formulaic Alphas” project

China International Capital Corp (Top 4 Investment Bank in China) Oct 2017 – Jan 2018

Wealth Management Quantitative Analytics Intern Beijing

- Quant Modeling: developed a VBA program to automatically conduct attribution analysis by Brinson Model, analyzed the performance sustainability of hedge funds using Transition Matrix, and conducted risk attribution analysis by Barra Model
- Quant Analytics: tracked holdings, evaluated performances, and generated weekly reports for 47 hedge funds by VBA

Standard & Poor's May 2017 - Jul 2017

Financial Risk Analyst Intern Beijing

- Risk Modeling: participated in a credit rating project for a top financial institution, conducted fundamental research on 19 counterparty companies, rated target companies using Scorecards Model, drafted and presented rating reports for the client
- Data Processing: processed default data by mapping S&P's default rates to credit ratings defined by Basel III

PROJECTS

Fixed Income Portfolio Management | *Columbia University* Sep 2018 – Nov 2018

- Portfolio Management: constructed fixed income portfolio on investment-grade bonds, hedged portfolio Duration and Convexity using IRS and Futures, and applied Flatteners/Steepeners and Butterfly strategies to the portfolio
- Performance Report: monitored and rebalanced portfolio weekly, drafted and presented portfolio performance report

Portfolio Risk Calculation System, *Columbia University* Sep 2018 - Nov 2018

- Risk Modeling: lead a team to developed risk calculation system to compute Monte Carlo, historical, and parametric VaR and Expected Shortfall of portfolios containing stocks and options under moving window and exponential weighting
- Risk Documentation: Backtested VaRs against history, drafted model documentation and risk reports

SKILLS & INTERESTS

- **Programming & Tools:** Proficient in Python, MATLAB; Significant Experience with C/C++, Excel VBA, SQL; Git, Bash; Experience with R, SAS, Stata, SPSS; Financial Terminals: Bloomberg, Wind; Microsoft: Excel, Word, PowerPoint
- **Certificates & Associations:** CFA Level II, FRM Level I, SAS Advanced Programmer; member of GARP, IAQF
- **Interests:** Tennis, Guitar