Jiaxin Li

jl4586@cornell.edu   cell: 805-886-7661

EDUCATION

Cornell University, College of Engineering, Ithaca, NY   Expected December 2025
Master of Engineering in Financial Engineering, GPA: 4.06
Relevant Coursework: Machine Learning, Python for Finance, Optimization, Fixed Income & Derivatives Securities, Investment and Portfolio Management, Bond Mathematics & Mortgage-Backed Securities, Interest Rate Options

University of California Santa Barbara, Santa Barbara, CA   June 2024
Bachelor of Science in Financial Mathematics & Statistics, GPA: 3.53, Dean's Honors (L&S)
Relevant Coursework: Computer Science, Data Science Principle, Probability & Statistics, Stochastic Process, Regression Analysis, Methods of Analysis, European & Asian Options, Black-Scholes Model
Club/Activities: UCSB AWM (Association for Women in Mathematics), UCSB ECONLAB

TECHNICAL SKILLS & TOOLS

Python (Pandas, Scikit-Learn, NumPy, SciPy), R, SQL, MATLAB, Excel

PROFESSIONAL EXPERIENCE

Quantitative Research Assistant, Cornell University, Ithaca, NY   February 2025 - Present
- Analyze Apple Inc.'s evolving industry classification, leveraging pandas, NumPy, Matplotlib, and scikit-learn, by assessing its return correlation with various sector ETFs using similarity matrices (Pearson correlation, Euclidean distance), K-means clustering, and Spectral clustering
- Identify an increasing correlation between AAPL and consumer discretionary stocks, providing empirical support for the hypothesis that Apple is transitioning from a technology company to a consumer-driven brand
- Author an academic research paper on predicting industry drift, demonstrating how these correlation patterns and clustering insights can be applied to bolster portfolio management strategies and asset allocation decisions

Asset Management Analyst, *Nomura Orient International Securities Co., Ltd.*, Shanghai, China   July - September 2023
- Enhanced prediction power by 15% by improving the 3-Statement Model through data cleaning and optimization of fundamental quant factors
- Automated outlier identification by leveraging empirical research on large datasets, including for Kingsoft and Microsoft, and developed Python models using Pandas and NumPy for financial data analysis
- Communicated actionable insights and business solutions to senior management by delivering a comprehensive 29-page report on the SaaS industry, including in-depth analysis of Microsoft's AI Copilot and Kingsoft's WPS AI

PROJECTS

Multi-Period Liquidity-Constrained Portfolio Optimization Project, Cornell University, Ithaca, NY   January 2025 - Present
- Design a sector-aware portfolio optimization model minimizing liquidity-adjusted Value-at-Risk (LVaR) across 55 U.S. equities, with differentiated constraints based on sector-specific trading volumes and market regimes
- Estimate expected returns, covariances, and liquidity metrics using 60-day rolling windows; adjust volatility using LVaR multipliers tied to asset liquidity and market conditions (normal vs. crisis)
- Automate weekly data retrieval and rebalancing with yfinance and CVXPY; outperformed standard models in back-tests

Quantitative Finance Project, Cornell University, Ithaca, NY   October - December 2024
- Developed and back-tested quantitative trading strategies using Python, including mean-variance frontier analysis, CAPM, and machine learning models like Random Forests, LASSO, and SVM
- Minimized risk exposure and enhanced predictive accuracy using market-neutral portfolios and advanced regression
- Leveraged alternative data sources and statistical methods to generate predictive signals, optimizing for out-of-sample performance

ACTIVITIES & INTERESTS

UCSB Study Group Organizer: Spearheaded a study group tackling numerical problems, boosting class performance
Interests: Poker, Astrology, Board Games, Yoga, Photography, Piano