Royce Jiang

Bayonne, NJ | royce.jiang@rutgers.edu | (909) 859-9316

EDUCATION

Rutgers Business School – Newark, NJ **Dec 2022**

Master of Quantitative Finance (GPA: 3.8/4.0)

Courses: Financial Time Series, Financial Modeling, Indexing and ETFs, Object Oriented Programming (Python, C++), Stochastic Calculus, Quantitative Equity Trading, Derivatives, Hedge Fund Strategies, Applied Portfolio Management, Risk Management

New York University, Stern School of Business – New York, NY **May 2019**

Bachelor of Science, Major in Business Concentrating in Finance and Management

SKILLS & CERTIFICATES

Technical Skills: Python (ML: TensorFlow, scikit-learn, Keras), R, SQL, Excel, Bloomberg, Capital IQ, JavaScript, C++

Certificates: CFA Level II Candidate, Caltech AI & Machine Learning Bootcamp, Baruch MFE Probability Theory, Advanced Calculus, and Numerical Linear Algebra Certificates with Distinction, Rotman Int'l Trading Competition – Top 15

PROFESSIONAL EXPERIENCE

Susquehanna International Group – Bala Cynwyd, PA **Jun 2022 – Aug 2022**

Buy Side Research Summer Analyst, Biotech and Healthcare Desk

Member of Research team that improved trader P&L by researching idiosyncratic risks of companies, sectors, and upcoming events. Improved Biotech team workflow by automating tasks and promoting collaboration with Quant team to find alpha in the sector.

- Created a Python script that correctly identifies the first instance of earnings announcements as well as changes in earnings dates/times to enhance existing earnings algorithm, allowing market makers to price in new volatility as soon as possible
- Created an automated database for important FDA events, such as Clinical Holds, PDUFA decisions, AdCom meetings, etc. using a web scraper. This was previously manually updated and had no consistency in formatting so was difficult for the Quant team to use. Now the database has clean data for event type and price/volume action and is being analyzed for tradable patterns
- Assessed the impact of the Inflation Reduction Act on Pharma companies by analyzing the sales of individual drugs and annual Medicare/Medicaid spending on the drugs. Analysts and traders used this to update their fair values and pricing models
- Updated traders on important developments during market close and provided probability distribution of upcoming catalysts
- Placed 3rd in company-wide poker tournament

OptionsPlay – New York, NY **May 2021 – Present**

Quantitative Analyst

Lead a new Quant team that directly supports Chief Strategist on building and analyzing new options trading indicators and strategies, as well as maintaining the background infrastructure that generates client reports.

- Developed, backtested, and analyzed historical options and underlying prices, volatility, and volumes using clustering, regression, and other statistical methods and published reports for senior management and clients
- Developed an algorithm for calculating the ideal hedge for a portfolio using implied volatility, VIX index level, asset beta, etc. as inputs that is being used by institutional money managers to protect their portfolios from market downturns
- Published a whitepaper for NASDAQ on the historical performance of various technical indicators and their performance on the SPX and NDX indices that is being used as a lead magnet to attract new clients
- Developed and maintained various daily market scans and trade recommendation algorithms using Python that is published hourly using an API and used by both retail and institutional clients

PROJECTS

Personal Trading **Fall 2021 – Present**

- Currently running multiple volatility risk premium harvesting strategies with holding periods ranging from 1 day to 2 weeks using automated volatility models (GARCH, HAR) and scanners. Working on automating some simple strategies
- Researching 0DTE strategies based on MOC orders and momentum acceleration effects
- Researching the lag between different public REIT sectors and private counterparts' sentiment for potential arbitrage strategies

Indexing and ETFs – Small Cap Value Index with a Stock Buyback Tilt **Spring 2021**

- Developed a rules-based index aimed at capturing the negative long-term effects of stock buybacks on small cap value companies
- Identified trends in historical stock buybacks and pulled pricing data from CapitalIQ for calculating the index
- Determined the optimal weighting scheme through backtesting and created the rulebook to describe the development process
- Created the marketing materials, including a presentation for prospective licensees

Time Series Analysis – Predicting and Trading Gold Prices in R **Spring 2021**

- Used ARIMA model to study the significance of key drivers of gold prices and its correlation with other assets; found that MA1, trading volume, VIX level, and silver prices were the most statistically significant drivers
- Used GARCH model to forecast the volatility and developed and backtested an short straddle option strategy using model outputs