# Mengjing (Cici) Yang

5105 S. Harper Ave., Chicago, IL | 504-208-0000 | myang6@uchicago.edu | Linkedin

## **EDUCATION**

## The University of Chicago

Chicago, IL

#### Master of Science in Financial Mathematics (GPA: 3.9/4.0)

August 2023 – December 2024

• Courses: Statistics Inference (Phd Level), Machine Learning for Finance, Stochastic Calculus, Portfolio Theory & Risk Management, Option Pricing, Probability & Stochastic Processes

#### **Tulane University**

New Orleans, LA

#### **Bachelor of Science with Honors in Finance (GPA: 3.8/4.0)**

**August 2019 - May 2022** 

- Courses: Multivariate Calculus, Probability Theory, Numerical Linear Algebra, Risk Management, Advanced Finance Management, Business Analytics
- Awards: Top 5% Honors; Dean's list

## **Additional Certificates & Programs:**

**October 2021 - April 2022** 

• Baruch College Certificates: C++ Programming for Financial Engineering, Probability Theory for Financial Application (with Distinction), Numerical Linear Algebra (with Distinction), Advanced Calculus (with Distinction)

#### SKILLS

Computing: C++, Python, R, Excel VBA, SQL, MS Office, Data Structure and Algorithms

**Knowledge:** Option Pricing and Hedging, Financial Markets, Machine Learning, Statistical Modeling, Data Analytics **Asset Classes:** Options, Futures, Commodities, Fixed Income, Equities

# EXPERIENCE

## GoldenStone Investments LP Ouantitative Trading Intern

Chicago, IL

**June 2024 – August 2024** 

• Researched and developed a systematic equity option strategy by ranking predictions from a weighted regularized linear regression against hand-engineered features such as EMA of implied vol, volatility cone, and RSI

- Achieved statistically significant positive PnL on a monthly backtest of mid-to-mid delta residualized returns
- Automated a volatility visualization suite to facilitate the generation of pair trading ideas
- Created screening signals inspired by real-time shadowing of discretionary traders and performed trade execution

# **Essence Securities Co., Ltd Quantitative Trading Intern**

Shanghai, China

**April 2023 – July 2023** 

June 2021 – August 2021

- Developed a vol surface mean reversion intraday strategy leveraging SVI model using 50ETF SH options in Python
- Measured the dislocation threshold from parameterized model to bid-ask spread for robustness using tick-level data
- Decomposed PnL into delta and vega; enhanced hedging with vega-neutral pair options and synthetic forwards

## Millennium Management Ouantitative Analyst Intern

New York, NY

# Developed pricing tools for commodities traders' intraday P&L risk management leveraging Excel VBA

- Generated valuation reports for volatility products (Varswap, Volswap) to reconcile P&L of OTC trades
- Built on/off-shore interest rate spread curve using cubic spline interpolation for off-shore swaps pricing in Python

#### RESEARCH & PROJECTS

# Home Credit – Credit Risk Model Stability Kaggle Competition (LB Top 1%)

February 2024 – April 2024

- Predicted potential clients' default risks through large-scale alternative data, evaluated using a Gini stability metric
- Performed feature engineering with Polars to save memory, including count encoding and manual feature selection
- Ensembled a LightGBM model using custom count encoding to lift CatBoost's baseline CV AUC from 80% to 85%

### **Order Matching Engine (UChicago Course Project)**

October 2023 – October 2023

- Developed an order matching engine with an order sending interface in Python with robust exception handling
- Categorized orders into market, limit, and IOC orders and handled orders with unqualified type and quantity
- Optimized order matching algorithms using priority queues and executed comprehensive unit testing

#### **ADDITIONAL INFORMATION**

**Languages:** Mandarin (native)

Extracurriculars: Alpha Kappa Psi, UChicago x Citadel Securities Trading Challenge (Top 3)

**Interests:** Traveling, Poker (Winner of UChicago x SIG Women Poker Tournamet)