# Allen Wang

allenwangtrack@gmail.com, (408)-823-9806

#### **EDUCATION**

The University of Chicago - GPA: 3.92/4.0

Chicago, IL

B.S. in Applied Mathematics

Expected June 2026

Honors:

• 1x USAJMO, 4x AIME, AMC Distinguished Honor Roll, USACO Gold

Activities:

• Varsity Track and Field, Maroon Capital, Paragon Global Investments, Financial Markets Program, AKPSI

# **EXPERIENCE**

# **Quantitative Trader Intern**

Sunnyvale, California

Finalyze Capital

June 2024 - Present

• Currently learning about and gaining experience with the futures market

• Developing currency-carry trading algorithm project to be potentially traded by the firm

## RESEARCH EXPERIENCE

## Research Assistant

Chicago, Illinois

The University of Chicago Booth School of Business

January 2024 - Present

- Forecasting volatility in high frequency trading with Professor Dacheng Xiu and team of graduates
- Co-leading subgroup of 4+ undergraduate research assistants
- Developed 5+ python/slurm scripts for data mining which are still used by the team to this day
- Balancing 20+ hour weeks + 3-4 deliverables a week + 2-3 weekly meetings with professor and team
- Working with futures of 60+ assets across commodities, forex, bonds, CEI dating back to 1996

#### Research Assistant

Chicago, Illinois

The University of Chicago Math REU

June 2024 - Present

- Currently researching topics in statistics including markov chains and convex optimization under Baichen Tan
- Co-authoring paper on finite markov chains

# **PROJECTS**

## **Options Pinning Systematic Trading Algorithm**

January 2024 - April 2024

- Expanded on ideas in "Mathematical Models for Stock Pinning Near Option Expiration Dates" Avellaneda et al.
- Created an open interest metric signal to detect options pinning
- Developed mean reversion algorithm with over 90% win rate on signaled assets/contracts

# Twitter Sentiment Analysis Trading Algorithm

January 2024 - March 2024

- Created "engagement metric" of twitter posts including hashtags of stock tickers
- Developed algorithm to build and rebalance equal weight portfolio based on engagement metric
- Implemented 3 layer CNN in attempt to predict returns from engagement metric
- 59% return in 2 year span, 1.04 Sharpe/1.13 Sortino, 14% max drawdown + beats SP500 by over 4x

## **Technical Analysis Trading Algorithm**

December 2023 - January 2024

- Experimented with moving average convergence and stochastic oscillators
- Developed a combined mean reversion and momentum based trading algorithm
- 30%+ average yearly returns and beats SP500 return by over 2x based on backtesting

#### **SKILLS & INTERESTS**

Languages: English (Fluent), Mandarin (Native)

Computer: Proficient in Python, Java, C++, Pandas, NumPy

Interests: Poker, Football, Piano, Basketball, Fashion, Movies, Photography, Travel, Violin