

JAMES CHEN

Chicago, IL | (312) 213-4386 | guanyuc@uchicago.edu

EDUCATION

The University of Chicago

Chicago, IL

Master of Science in Financial Mathematics

Expected December 2025

- Courses: Portfolio Theory & Risk Management, Python, Option Pricing, Probability & Stochastic Processes

Bachelor of Arts in Mathematics

June 2024

- Honors: Dean's List; Courses: Probabilities, Linear Algebra, Numerical Methods, Machine Learning

SKILLS

Technical Skills: Microsoft Office, SQL, Python(Numpy, Pandas, Scikit-learn), Stata, R Studio, C/C++, Matlab, Capital IQ

Language: Mandarin(native), French(basic)

EXPERIENCE

Booth School of Business, University of Chicago

Chicago, IL

Research Assistant for Dr. Xiu Dacheng

June 2024 - Present

- Developed an algorithm for entity anonymization to mitigate large language model's look-ahead bias and distraction effect, cleaning 20 years of news headlines and bodies for generating sentiment analysis vectors
- Transformed hourly sentiment data into monthly vectors, analyzed contextualized news text in 13 languages to assess market inefficiencies using Ridge regression, achieving a Sharpe ratio of 1.4 on 2023 out-of-sample data

Huatai Securities

Nanjing, China

Quantitative Trader Intern

July 2024 - Present

- Constructed signals using 30-second interval Level 2 buy and sell data to model order book shape, combining these signals with XGBoost to predict returns, achieving a Sharpe ratio of 1.32 on the 2023 testing dataset
- Cleaned stock index and futures data, calculated the real basis rate, and used rolling window regression on the implied OTC basis rate to price the real basis rate, generating signals that reduced hedging costs by 12%

Blackthorne Capital Management

Chicago, IL

Quantitative Research Intern

November 2023 - March 2024

- Cleansed a comprehensive 13-year dataset spanning 10 asset classes using Python's pandas library; completed tasks including duplicate removal, missing value handling, data standardization, and outlier detection
- Implemented adjustments to account for COVID-19 related anomalies, preserving data integrity for future analyses
- Utilized Python tools (Pandas, NumPy, sklearn) to design and test preliminary momentum trading strategies, such as moving average crossovers, across various asset classes, including US Energy Indices
- Executed grid search analysis to optimize strategy parameters, and assessed performance through seven financial metrics, notably achieving a Sharpe ratio of 1.43, improved efficacy of investment strategies

Bain & Company

Shanghai, China

Associate Consultant Intern

July 2023 - September 2023

- Identified four key growth drivers and contributed to developing a bottom-up AOP P&L model, projected a 32% increase in growth and informed 2024 annual operating plan for client's retail and food service divisions
- Collaborated with client's finance team to analyze growth rates across distribution channels and product categories
- Leveraged Nielsen retail metrics to conduct an in-depth price band and product category analysis and identified 12 pivotal stock-keeping units (SKUs) essential for market penetration and competitive positioning

LEADERSHIP EXPERIENCE

Pacific Investment Research

Chicago, IL

Project Manager

September 2021 - Present

- Conducted industry research in the U.S. healthcare sector, focusing on specialty care and telehealth, while regularly updating the team on macroeconomic analysis and market trends to inform investment decisions

Education Without Barriers

Remote

Principal

July 2021 - Present

- Collaborated with the Dalian Children's Welfare Institute to co-found and manage an educational site from ground up, overseeing recruitment of over 30 tutors and successfully raising more than \$20K in funds for teaching equipment

campusCATALYST

Chicago, IL

Project Manager

January 2023 - March 2023

- Spearheaded a team to evaluate Mission Quest's revenue streams across 21 states, formulating a strategic Google Ads campaign that boosted quarterly revenue by 18% and enhanced client engagement and market penetration