**ZICHAO (DAVID) XIANG**
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## EDUCATION

**MIT SLOAN SCHOOL OF MANAGEMENT** Cambridge, MA
*Candidate for Master of Finance, February 2026* July 2024 – February 2026

- GPA: 5.0 / 5.0; Pursuing Financial Engineering Concentration
- GRE Score: Verbal 169/170 (96%), Quantitative 170/170 (97%)
- Anticipated Coursework: Advanced Mathematical Methods for Financial Engineering, Financial Engineering, Financial Data Science and Computing, Proseminar in Capital Markets/Investment Management
- Involvement: Akuna Capital Quant Trading Challenge, Quantitative Financial Market Club

**WASHINGTON UNIVERSITY IN ST. LOUIS** St. Louis, MO
*Bachelor of Arts in Economics and Computer Science, summa cum laude* September 2021 – May 2024

- GPA: 3.99 / 4.0; Minor in Mathematics
- Omicron Delta Epsilon (international honor society), May 2023
- Relevant Coursework: Data Structure and Algorithms, Introduction to Econometrics, Capital Markets & Financial Management, Introduction to Artificial Intelligence, Linear Algebra, Probability, Analysis of Algorithm
- Lead Teaching Assistant overseeing a team of 9, coordinated instructional support and designed assignments for courses Data Management Tools for Business Decisions and Capital Market & Financial Management
- Transferred from the New York University (Fall 2020)

## EXPERIENCE

**SHEPHERD VENTURES** Remote
***Quantitative Research Intern*** August 2024 – Present

- Assisted in the creation, research, and backtesting of a proprietary trading model designed to protect portfolios from Black Swan events by optimizing the stock preselection process and rebalance frequency, and applying portfolio injection methodology to maximize the protection rate by 200 basis points during historical Black Swan scenarios

**HYDE PARK INVESTMENT SERVICES, INC** New York, NY
***Algorithmic Trading Intern*** September 2023 – December 2023

- Estimated cost coefficient to quantify the permanent price impact of trade size and implemented Bertsimas & Lo's optimal trading policy, reducing expected execution costs by 30% compared to the naive approach
- Developed a predictive model to estimate trading costs for S&P 500 companies using Python's scikit-learn, achieving a 5% reduction in mean squared error by integrating Lag Features, Interaction Features, and enhanced data normalization
- Performed statistical analysis to verify that trading at noon and volumes are positively correlated with trading costs in S&P 500 stocks, while controlling for confounding variables; identified cost efficiencies with a 95% confidence level
- Backtested and optimized a VXX technical trading strategy over 10,000 trading days, achieving a 70%-win rate and demonstrating predictive accuracy in volatile market conditions

**PING AN BANK** Shenzhen, China
***M&A Analyst, Investment Banking Division*** June 2023 – August 2023

- Carried due diligence for 2 real estate M&A deals by directing macroeconomics and financial statements analysis, revenue modeling, and on-site visits to client firms
- Profiled 219 potential target China Concepts Stocks and developed lists of prospective companies for privatization
- Conducted research on 52 past real estate M&A transactions to identify trends and predict banks' lending requirements

## PROJECTS

**TECHNICAL INDICATOR-BASED SPY TRADING STRATEGY**

- Developed and backtested technical trading strategy for SPY using Python with 200-period moving average and 4-period RSI as signals, achieving an annualized return of 23% and a Sharpe ratio of 3.84 over 10,000 trading days

## ADDITIONAL INFORMATION

- Technical Skills: C++, Python, Java, SQL, STATA, R, MATLAB, Tableau
- Volunteer: Solicited over $2000 in donation as a student fundraiser for the WashU annual fund.
- Languages: Mandarin (native), Cantonese (fluent)
- Interests: Go (4-dan rank), Badminton (10 years)