

Yining (Coco) Qu

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Dear Hiring Manager,

I am currently a graduate student at the University of Chicago, pursuing a Master's Degree in Financial Mathematics, with an anticipated graduation in December 2024. I am writing to formally express my interest in your project lab. I believe my qualifications closely align with your requirements and am confident in my ability to make significant contributions to your team.

I hold an undergraduate degree in Applied Mathematics and Economics from Emory University, where I cultivated quantitative skills and expertise in financial mathematics. My coursework encompassed financial markets, time series analysis, portfolio management, and partial differential equations, providing me practical experience in portfolio optimization and economic forecasting. In my current graduate program, I successfully completed a range of courses, and my proficiency in Python extends to machine learning, which I applied to develop a Bitcoin trading system. This system underwent rigorous historical data backtesting and was seamlessly integrated into real-time trading. Additionally, in the Portfolio Theory and Risk Management course, I employed datasets to assess CAPM and LFPM models and conducted out-of-sample forecasting. My ongoing studies involve expanding my expertise in stochastic calculus, machine learning, C++, and data science in finance.

Building on my academic background, my research project at Emory University on copper price fluctuation significantly enhanced my practical data analysis skills. I adeptly employed statistical modeling and programming to pinpoint precise periods of copper price fluctuation and integrated vital datasets. In my capacity as the leader of the research team, I not only facilitated task completion but also orchestrated regular progress meetings with professors. This role showcased my leadership prowess and underscored my exceptional ability to employ programming languages in effectively synthesizing extensive datasets, thereby highlighting my strong analytical problem-solving skills and leadership acumen.

Moving from academia, my internship at Alpha Squared Capital was pivotal in applying trading strategies and advanced programming in real-world scenarios. I formulated Python-based trading strategies to optimize investment for conservative investors and engaged in high-frequency trading of oil futures, honing my risk management and market analysis skills through practical contributions to trade evaluations and market analysis.

Additionally, I possess communication and collaboration skills essential for this role. During my internship at Everbright Securities, I coordinated due diligence reports and conducted IPO interviews. I also engaged in cohesive team discussions and strategy formations in an investment simulation challenge. These experiences refined my ability to articulate insights and manage relationships in varied financial contexts.

In conclusion, I am enthusiastic about bringing my academic acumen, technical skills, and collaborative leadership to your project lab. I look forward to discussing my qualifications further. Thank you for considering my application.

Sincerely,
Yining Qu