

Graduate Personal Statement

Albert Einstein once said, "I have no special talents. I am only passionately curious." By being passionately curious, we continue to learn, and continue to push ourselves through to the limit. As a student who has challenged myself through four-year college education and found myself enthralled by the real-world financial cases, I believe it's time to narrow down the focus and broaden the path with my passionate curiosity towards mathematical finance.

When I was a kid, I liked to nuzzle up against my dad while watching him comparing data and drawing lines with different color pens. Like many stock fanatics, my dad devoted most of his spare time immersed in stock market performance data. This titillated my curiosity and made me wonder what was the real magic behind these numbers that attracted him. In 2007, while millions of households suffered severe capital losses from the unexpected stock market crash, my dad somehow managed to stay ahead of the curve. This is the first time I realized how investors can really make a difference and how severely financial systems can be affected.

In 2010, I enrolled at Syracuse University's Martin J. Whitman School of Management with a strongly focused academic plan as a major. I was straining at the leash to learn new things, and after completing my requirements, I added a second major in accounting and started to take course overloads each semester. Utilizing accounting as the language and basic tool of finance not only helped perfect my understanding of financial concepts but also enhanced my ability to excel in finance courses.

As I have studied both my major fields in greater depth, my interest has gradually shifted towards modeling, which has been widely used for financial statement forecasting and decision-making purposes. In real-world case studies, models such as Black Scholes for pricing financial options and Capital Asset Pricing Model for calculating the required rate of return are constantly being utilized to analyze data comprehensively. This experience not only provided me with better insight on the financial world but also enabled me to understand and analyze finance problems more intuitively. Seeing how those models can lead to objective and comparable results among various sets of statistics made me curious about the theory and logic behind modeling approaches.

Though I didn't have much practical experience with creating or reconstructing models, my passionate curiosity drove me to broader reading in depth. After reading the The Big Short by Michael Lewis, I was extremely shocked but fascinated by how the minorities were able to have the insight with the risk inherent in the assumption of skyrocketing real estate prices and make billions of dollars out of it. While I was digging more into personal enrichment, the documentary film Inside Job caught my attention and provided several different angles examining the 2008 financial crisis. Motivated by the insight provided by this documentary film, I conducted an independent study focusing on how default risk relates to the structure of CDOs with emphasis being placed on mortgage-backed securities specifically. Credit rating agencies were examined as well as a series of deregulation policies starting in the 1990s. By conducting research and analyzing data that I collected from Barclays Live under the guidance of my advisor, I reconstructed several basic credit risk models using Excel and VBA, which enabled me to explore the relationship between mortgage-backed securities and the extreme default rate of CDOs in 2008. This valuable independent study driven by my passionate curiosity was my very first hands-on experience with modeling. Therefore, instead of pursuing a master's degree in general finance, quantitative finance better fits my academic interest. Unlike general finance, which focuses more on subjective fundamental analysis, quantitative finance relies heavily on mathematical analysis. Since models can always be reconstructed with changing elements, technical analysis provides more impartial and accurate outcomes.

In addition to pure academic study, internships have helped convert my classroom knowledge into real-world application. While my earlier internship experience with Guotai Junan Securities Co. as a financial analyst was a down-to-earth introduction to the financial world, my most recent internship experience with the Financial Reporting Council, the UK's independent regulator, prepared me better for the real workplace since I was assigned to assist across various departments on different projects. By making full use of my dual-major advantage, I'm able to fulfill every task assigned with greater efficiency. During these internships, I took every opportunity to learn from both colleagues and supervisors on every aspect that I need to improve on. Those valuable work experiences strengthened my determination of becoming an all-around financial professional who is able to correlate knowledge across disciplines.

As I searched for the right master's program for me, I was immediately impressed that Boston University encourages all MF students to complete a two-month summer internship. Moreover, 97% of BU MSMF students find financial job placements upon graduation due to the successful collaboration Boston University's Mathematical Finance Program maintains with industry-leading companies. Combined, these factors make the BU experience a great chance for gaining real work experience while building connections for future job opportunities. Besides that, Boston School of Management also provides students with a variety of career resources, which will help guide me through the job-hunting process.

If I were admitted to this program, I would seize every learning and networking opportunity to pave my way for employment in a multinational company upon my graduation. As an international student, I'm deeply aware of the huge impact fluctuations of foreign currency can make in foreign transactions. As a byproduct of globalization, currency volatility has substantial influence on companies' operations and profitability. Therefore, I would like to help multinational companies avoid unnecessary risks due to currency fluctuations by forecasting cost, predicting changes and future trends, and establishing hedging tools. In addition, I plan to earn my CFA credential following graduation as I build professional experience.

I believe my solid academic background together with real-world working experiences make me a perfect fit for the Mathematical Finance Program at Boston University. Passionate curiosity has always been the driving force behind my hard work, and will help me to be a valuable contributor to your program and to excel in my master's studies and professional life.