

I chose to major in Mathematics with an emphasis on Financial Mathematics and Statistics because I have always been interested in how mathematical concepts are created and applied to solve real-world problems. I am particularly drawn to applying my knowledge in finance and data science, which has inspired me to pursue a career as a certified actuary. This career path combines math, finance, and statistics, aligning perfectly with my interests and allowing me to use my analytical skills in a meaningful way.

I have been fortunate to gain valuable experience through academic and extracurricular activities. During an Undergraduate Math Research Project (REU) at the University of North Carolina Charlotte, my partner and I worked on applying machine learning techniques to personalized medicine. We conducted simulations in R and explored statistical learning methods to determine optimal treatments based on individual characteristics. This project helped me gain a deeper understanding of statistical modeling and how data can be used to solve complex problems.

In addition, I am currently the team leader for the KENO project, where I guide new members on calculating probabilities and coding simulations for the game. My main goal is to create a poster for this year's undergraduate research presentation and draft a manuscript summarizing our findings. This leadership role has allowed me to improve my communication and organizational skills while deepening my knowledge of probability and statistics.

I also participated in the Spring 2024 DataFest competition, where my team earned the runner-up prize. We analyzed data on textbook effectiveness, created visualizations, and provided recommendations on which textbooks were easiest to understand and helped students learn most efficiently. This competition taught me how to work effectively under pressure, collaborate with others, and present results clearly—skills that are important for an actuary.

These experiences have allowed me to build a solid foundation in mathematics, statistics, and data analysis, while also strengthening my teamwork and leadership abilities. They have provided me with practical skills in problem-solving, data interpretation, and collaboration—essential qualities for a successful actuary. My goal is to pass 6 actuarial exams before graduation and earn my Associate of the Society of Actuaries (ASA) designation soon after. I am confident that the knowledge and experience I've gained at Mizzou will help me to excel as a professional actuary and make meaningful contributions to the field.