Dear Admissions Committee,

My name is Zhu Kunlin, and I am currently a senior undergraduate student at Renmin University of China, pursuing a dual degree in Mathematics and Economics. I am writing to express my strong interest in applying for the PhD in Statistics at Duke University. My academic journey, driven by a deep fascination with numbers and their real-world applications, has led me to explore the intersection of mathematics and economics, and I am eager to further my studies in this field.

Since childhood, I have been captivated by the elegance and logic of numbers. My natural aptitude for mathematics consistently placed me at the top of my class, and it was this passion that guided me to pursue a degree in Mathematics at Renmin University. However, my perspective on mathematics underwent a profound transformation during my second year, when I attended a lecture on economic modeling. For the first time, I realized that mathematics was not merely an abstract discipline confined to textbooks and problem sets; it was also a powerful tool for understanding and solving real-world economic problems. This revelation sparked a newfound interest in economics, and I decided to pursue a dual degree to explore the synergy between these two fields.

Under the guidance of my professors, I delved into economic models and theories, discovering how mathematical rigor could be applied to analyze complex economic phenomena. For instance, in my coursework on Game Theory, I used advanced mathematical tools to study strategic interactions among economic agents, which deepened my understanding of market dynamics and decision-making processes. Additionally, my research project on income inequality allowed me to apply econometric methods to large datasets, uncovering patterns and trends that informed policy recommendations. These experiences not only honed my technical skills but also sharpened my ability to observe and interpret the social and economic issues unfolding around me.

Through my coursework and independent research, I have developed a strong foundation in economic modeling and data analysis. For instance, in my advanced econometrics course, I conducted a comprehensive analysis of income inequality using real-world datasets, which further solidified my passion for applying mathematical tools to economic problems.

I am particularly drawn to Duke University because of its renowned faculty, cutting-edge research facilities, and emphasis on interdisciplinary collaboration. The PhD in Statistics at Duke University aligns perfectly with my academic interests, and I am eager to contribute to ongoing research projects while further developing my analytical and problem-solving skills. I am confident that the rigorous curriculum and vibrant academic community at Duke University will provide the ideal environment for me to achieve my goals.

In the long term, I aspire to become a researcher and educator, bridging the gap between mathematics and economics to address pressing global challenges. I am particularly interested in exploring topics such as Specific Research Interest, e.g., behavioral economics, financial econometrics, or economic policy modeling, and I believe that the PhD in Statistics at Duke

University   will equip me with the knowledge and tools necessary to make meaningful contributions to the field.

Thank you for considering my application. I look forward to the opportunity to contribute to and learn from the academic community at Duke University.

Sincerely,
Zhu Kunlin