# **Application Letter**

Dear admission committee,

My name is Mingyang Teng, and I am writing to express my sincere interest in applying for admission to PhD in Statistics at Yale University. Yale University's reputation for academic excellence, innovative research opportunities, and distinguished faculty aligns perfectly with my academic aspirations and career goals.

I hold a Bachelor's degree in Economics from [Your Current University], where I graduated with honors. My academic journey has been marked by a strong commitment to understanding complex economic systems and developing analytical skills that can be applied to real-world challenges. During my undergraduate studies, I maintained a GPA of 3.8, consistently ranking among the top students in my cohort. My coursework included advanced microeconomics, macroeconomics, econometrics, and economic development theory, which provided me with a solid foundation in both theoretical and applied economics.

What truly sets Yale University apart is its interdisciplinary approach to economic research. The integration of data science techniques with traditional economic analysis, as evidenced by the groundbreaking work of your faculty members, resonates deeply with my own research interests. I am particularly drawn to the opportunity to explore how machine learning algorithms can enhance predictive models in economic forecasting. My previous research experience, including a thesis on classical political economy, has equipped me with the quantitative skills necessary to contribute meaningfully to such interdisciplinary projects.

Beyond academics, I have actively sought practical experiences that complement my theoretical knowledge. I interned at CICC, where I assisted in analyzing market trends and developing policy recommendations for sustainable economic growth. This experience not only reinforced my passion for economics but also highlighted the importance of data-driven decision-making in addressing contemporary economic issues. Additionally, my involvement in MCM, further honed my ability to work in team settings and communicate complex economic concepts to diverse audiences.

I am particularly impressed by the collaborative research environment fostered by Yale University. The numerous research centers and institutes dedicated to economic policy, development economics, and financial innovation create an ecosystem where students can engage with cutting-edge research from day one. I am eager to contribute to ongoing projects at Political economy of socialism with Chinese characteristics Research Center and collaborate with peers and faculty who share my passion for leveraging economic principles to solve global challenges.

My career objective is to become a researcher capable of bridging the gap between academic theory and practical policy implementation. I aim to develop innovative economic models that can inform decision-makers in creating more equitable and efficient economic systems. The PhD in Statistics program at Yale University will provide me with the advanced training in econometric methods, data analysis, and economic theory necessary to achieve this goal. I am particularly looking forward to courses such as Mathematical Analysis, Advanced Algebra, and Probability Theory, which align closely with my research interests and will further develop my expertise in this field.

I am aware of the rigorous academic standards maintained by Yale University and am committed to meeting and exceeding these expectations. I have prepared extensively for the challenges of graduate-level study through self-directed learning in advanced statistical methods and programming languages relevant to economic research. My proficiency in Python and R, along with my experience using Stata for econometric analysis, will enable me to hit the ground running in your program.

The opportunity to study at Yale University would be a transformative milestone in my academic and professional journey. I am confident that the combination of your esteemed faculty, world-class research facilities, and collaborative academic community will provide the ideal environment for me to grow as a scholar and make meaningful contributions to the field of economics.

Thank you for considering my application. I would be honored to join the community of scholars at Yale University and am eager to contribute my unique perspective and dedication to excellence in the pursuit of knowledge.

Sincerely,

Mingyang Teng