March 07, 2025

Graduate Admissions Committee
Department of Economics
Barcelona School of Economics (BSE)

Dear Admissions Committee,

I am writing to express my strong interest in the MA in Economics at Barcelona School of Economics (BSE). With my dual background in Economics and Computer Science from Renmin University of China, coupled with significant research and practical experience in quantitative methods, I am eager to contribute to your distinguished program.

Academic Background and Research Experience

As a top student in the Mingde Environmental Economics-Science Gaoli Dual Degree Program at Renmin University of China (GPA: 3.82/4.0 in Economics, 3.87/4.0 in Computer Science), I have developed a robust foundation in both economic theory and quantitative methodologies. My exchange experience at the University of California, Davis, where I achieved a 4.0 GPA in Economic & Finance Forecasting and Intermediate Micro Theory, further broadened my international perspective.

My research experience demonstrates my ability to apply theoretical knowledge to real-world problems. Working with Prof. Xu, I developed optimized CPPI strategies using VaR for risk control and EGARCH models, implementing rolling-window backtesting for major market indices. This project enhanced my understanding of mathematical modeling and financial econometrics, skills directly applicable to the MA in Economics at your institution.

Publications and Collaborative Research

My academic pursuits have already yielded tangible results with two publications on the concept of prosumers in the new economy. Working on the Mitacs Globalink Research Project with Prof. Ertz from Université du Québec, I designed a novel index to quantify prosumer roles, employing factor analysis and weighted scoring techniques. This collaborative international research experience prepared me for the rigorous academic environment of your program.

Applied Experience and Technical Skills

My internship at Trove Applied Quantitative Technology allowed me to develop practical expertise in quantitative finance, where I built a comprehensive long-short backtesting system and implemented risk control measures, achieving significant excess returns over the benchmark. Additionally, at the International Monetary Institute, I conducted an in-depth review of CBDC literature and developed a multi-dimensional index system, utilizing NLP techniques and Word2Vec for semi-supervised text learning.

My technical proficiency in STATA, Python, R, MATLAB, SQL, and various data visualization tools enables me to approach complex problems from multiple angles. These skills, combined with my strong mathematical background evidenced by awards in mathematical modeling competitions, position me to make meaningful contributions to research at Barcelona School of Economics (BSE).

Program Fit and Future Goals

I am particularly drawn to Barcelona School of Economics (BSE)'s MA in Economics because of its excellent reputation in the field and distinguished faculty. The program's focus on quantitative methods and rigorous curriculum aligns perfectly with my research interests in economic modeling and data analysis.

After completing the MA in Economics, I aim to pursue a career that combines advanced quantitative analysis with economic insights, either in academia or in policy research. The rigorous curriculum, distinguished faculty, and research opportunities at Barcelona School of Economics (BSE) will provide the ideal environment for me to develop the expertise necessary to achieve this goal.

I am confident that my academic background, research experience, and technical skills make me a strong candidate for your program. I would be honored to join the Barcelona School of Economics (BSE) community and contribute to its tradition of excellence.

Thank you for considering my application. I look forward to the opportunity to discuss how I can contribute to your program.

Sincerely,

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