MINGJIE ZHANG

Email: mingjiezhang415411@gmail.com ◇ School Email: mrqianmo@mail.ustc.edu.cn
University of Science and Technology of China,96 Jinzhai Road - 230026 Hefei - P.R.China

EDUCATION

University of Science and Technology of China Sep.2021-Present
Special Class for the Gifted Young

- **Major**: Statistics **GPA**: 4.05/4.3, major ranking 1/54
- **Academic Interest**: High dimensional statistics, Machine Learning, Economics, Probability Theory.

HONORS AND AWARDS

- **Outstanding Freshman Scholarship.** Awarded to freshmen with outstanding academic performance upon admission. Sep.2021
- **Rose Fund Ambition Scholarship.** Awarded to top 2% students in the School of Gifted Young. Oct.2022
- **The Chinese Mathematics Competitions, First price** Mathematics competition on mathematical analysis and linear algebra. Jan.2023
- **Rose Fund Public Affairs Scholarship.** Awarded to students demonstrating active and consistent engagement in volunteer activities. May.2023
- **Yang Yongman Scholarship.** This award recognizes excellent academic performance. Oct.2023
- **Outstanding Teaching Assistant.** This award recognizes exceptional teaching support. Mar.2024
- **National Scholarship.** Awarded to top-performing students with outstanding academic achievements and well-rounded excellence. Sep.2024

RESEARCH EXPERIENCE

NCSU Winter GEARS Online Program. My research focuses on option pricing, a key aspect of financial derivatives. Leveraging the Black-Scholes model, I employed the Crank-Nicolson method for numerical solutions of European options. Jan.2023-Feb.2023

Research on the Correlation between Genes and Tone. Formulate hypothetical explanations for the correlation between genes and tone, and design experiments to test the correspondence between genes and tone based on these hypotheses. Identify target dialect points and target detection genes, sample populations from these dialect points, collect genetic and linguistic data, and validate the experimental hypothesis. Dec.2023-Present

Boosting or Bagging? Navigating Weak Signals Worked under the guidance of Professor Dacheng Xiu and Dr. Zhouyu Shen at the University of Chicago Booth School of Business, exploring the predictive properties of Bagging and Boosting under weak signals and high-dimensional settings. Our research explores their relationship with Ridge and LASSO, revealing that Bagging behaves similarly to Ridge and outperforms the zero predictor, while Boosting resembles LASSO but underperforms compared to the zero predictor. Feb.2024-Present

TEACHING ASSISTANT EXPERIENCE

- **Mathematical Analysis B1** Sep.2023-Jan.2024
- **Mathematical Analysis B2** Mar.2024-Jul.2024
- **Regression Analysis** Sep.2024-Jan.2025

LEADERSHIP AND ACTIVITIES

- Vice president of Students Singing association and actively hold and Singing events for the member of Students Singing association.
- Participate in school and community volunteer activities.