Yihong Zuo

zuoyihong@mail.ustc.edu.cn

EDUCATION

University of Science and Technology of China — Hefei, China
Undergraduate in School of the Gifted Young, Majoring in Statistics — *Aug. 2022 – Jun.2026(expected)*

- Overall GPA: 4.04/4.3(92.63/100)
- Major GPA: 4.24/4.3(95.06/100)

Relevant Coursework

- Mathematical Analysis (96)
- Linear Algebra (96)
- Probability (98)
- Regression Analysis (95)
- Data Structures(95)
- Algebraic Structure(98)
- Introduction to Differential Equations(95)

RESEARCH/PROJECTS EXPERIENCES

Modern Linear Regression Models — USTC
Advisor: Prof. Yaning Yang (Department of Finance and Statistics, USTC) — *Dec. 2023 – Jan. 2024*

- Read on modern linear regression models regarding regression diagnostics, prediction, sparsity, and related issues in books and articles.
- Wrote over 300 lines of R code to implement many classic algorithms, such as Iteratively Reweighted Least Squares (IRLS) and K-fold Cross Validation for selecting optimal parameters.
- Using the linear regression model to conduct regression diagnostics, statistical inference, prediction, and other tasks with some real data.

Research Report on Data Dimensionality Reduction Methods — USTC
Advisor: Prof. Falai Chen (Department of Mathematical Sciences, USTC) — *Oct. 2023 – Jan. 2024*

- Summarized commonly used data dimensionality reduction methods, with a particular focus on elucidating their mathematical principles in the context of linear space.
- Conducted in-depth discussions on sparse principal component analysis and implemented the algorithms from the original paper using the R language.

Electromagnetics Course Paper — USTC
Advisor: Prof. San Lu (Department of Physics, USTC) — *Mar. 2023 – Jun. 2023*

- Led the team to complete the course paper on the application of the minimum action principle in electromagnetics. The paper was presented in a 20-minute presentation as an outstanding paper.
- Proposed an approximate computational method for complex electromagnetics and conducted numerical simulations using Python.

HONORS AND AWARDS

Excellent Student Scholarship(top 10%) — *2022 – 2023*
Rose Fund Endeavor Scholarship — *2022 – 2023*
Excellent Freshman Scholarship — *2022*
First Prize in the Chinese High School Mathematics League, Sichuan Province — *2021*

TECHNICAL SKILLS

Languages: C/C++, Python, R, Mathematica, Latex
Libraries: pandas, NumPy, Matplotlib
English: CET4: 559

LEADERSHIP/EXTRACURRICULAR ACTIVITIES

Scientific Exploration Association Contribution — *2022 – 2023*

Dedicated Volunteering — *2022*