Zhihe Xu

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EDUCATION

Sichuan University, School of Mathematics

Mathematics and Applied Mathematics (Outstanding Class)   September 2021-present

Overall GPA: 3.97/4.00   **Average Score: 94.26/100**   **Rank: 2/15 (Class)& 2/196 (All Major)**

Key courses: Mathematical Analysis I,II,III (95,97,98), Linear Algebra I,II (96,97), Abstract Algebra (99), Probability Theory (97), Ordinary Differential Equations (94), Real Analysis (96), General Topology (99), Mathematical Statistics (98), Operation Research (95), Functional Analysis (88), Partial Differential Equations (98), Numerical Analysis (94)

HONORS AND AWARDS

National Scholarship (Top 1%)	October 2023
First Class Scholarship (Top 3%)	September 2022
Outstanding Student of Sichuan University	September 2022, October 2023
The 15th Chinese Mathematics Competition (Final, First Prize, Ranked 20th)	April 2024
The 14th Chinese Mathematics Competition (Final, Third Prize)	May 2023
The Mathematical Contest in Modeling (Meritorious Winner)	April 2023
National Competition of Mathematics in Anhui, China (First Prize)	September 2020

ACADEMIC EXPERIENCE

Summer Research Programme   July 2024-August 2024

Supervised by Prof.Yang Xiang   Department of Mathematics, Hong Kong University of Science and Technology

· Topic: Kolmogorov–Arnold Networks

Computational Mathematics Seminar   January 2024-present

Organized by Prof.Qiaolin He   School of Mathematics, Sichuan University

· Topic: Finite Element Method (FEM), Neural Network for Solving PDEs

· Book: *The Mathematical Theory of Finite Element Methods* by Susanne C. Brenner

A Term Project on Residual Static Corrections of Preliminary Wave   December 2023- January 2024

Advisor: Associate Prof.Rui Zhu   School of Mathematics, Sichuan University

· This is the term project of Numerical Analysis, we designed a method to fit the first arrival time of seismic wave and separate disturbance based on the KKT conditions and the functional minimal property of cubic spline. We also programmed with Python to solve the problem.

· Academic writing: *A Method for Residual Static Corrections of Preliminary Wave Based on Cubic Spline*

OTHER EXPERIENCE & LEADERSHIP

Cambridge Summer Academic Programme   August 2023

· Take courses in business by Prof.Chris Coleridge and Prof.Nektarios Oraiopoulos.

· Take lectures in AI and NLP by Dr.Mariano Felice.

Captain of The Men's football team of School of Mathematics   September 2022 - June 2023

· Second Place in the "Freshman Cup"   November 2021

· Rookie of the Year   2021

Vice-President of SCU Math Fans Association   September 2022 - June 2023

· Hold various activities for math lovers.

· Organise lectures for exam preparation.

TECHNICAL STRENGTHS

Computer Languages	MATLAB, LaTeX, Python
Languages	Chinese(Native), English(CET-4: 607, CET-6: 588, TOEFL: 98)