

# Zefan Qian

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## EDUCATION

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### Bachelor of Arts in Mathematics and Economics

*Expected May 2023*

Macalester College, St. Paul, MN

*GPA: 3.98*

*Minor:* Data Science

*Honor & Awards:* 4-year of Turck Presidential Scholarship

*Coursework:* Differential Equation; Mathematical Modelling; Correlated Data; Bayesian Statistics; Mathematical Statistics; Real Analysis; Introduction to Econometrics; Empirical Finance; Behavioral and Experimental Economics

## SKILLS

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**Languages:** Mandarin (Native); English (Full Proficiency)

**Computer Languages:** R, STATA, Python, Java. Experience with Mathematica.

**Algorithms:** Statistical algorithms such as Markov Chain Monte Carlo simulations.

**Applications:**  $\text{\LaTeX}$ . Extensive experience with Microsoft system; proficient in Microsoft Office.

## EXPERIENCE

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### Economics Research Assistant, Macalester College, MN

December 2020 - Present

- Work under Dr. Felix Friedt to experiment with and implement a model evaluating the airport noise and house price
- Utilize STATA to clean raw data, analyze Econometrics data, and communicate research findings

### Preceptor, Macalester College, MN

September 2020 - Present

- Work with 100 students across Intermediate Microeconomic Analysis and Core Concepts in Computer Science
- Hold preceptor office hours for homework questions, grade homework and assist in class lectures

### Researcher, Introduction to Econometrics, Macalester College, MN

September 2021 - December 2021

- Conducted individual research on recreational marijuana legalization using difference in differences (Did)
- Found, cleaned, visualized and analyzed multiple datasets using STATA; presented the research results to the class

### Researcher, Mathematical Statistics, Macalester College, MN

January 2021 - March 2021

- Conducted collaborative research on the central limit theorem (CLT) and Lindeberg-Feller Condition
- We read publications and present the results to the class using MGF and characteristic function

### Researcher, Differential Equations, Macalester College, MN

September 2021 - Present

- Conducted collaborative research on the optimal strategy for a bike throw
- Built mathematical model using differential equations and ran simulations; presented the research results to the class

### Chinese Tutor, Macalester College, MN

September 2021 - Present

- Practice Chinese with students across first year Chinese students to students finishing their Chinese major
- Hold tutor office hours for homework questions and Chinese practice, grade homework and lead Chinese tea social

## COMMUNITY ENGAGEMENT

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### Public Forum Debate Judge, The National Speech & Debate Association China

July 2019 - Present

- Judge for over 100 flights of high school and middle school public forum debates
- Lead annual debate summer camp for Chinese students