



# Aden Chen

✉ adenc@uchicago.edu    adenchen27.github.io   **in** aden-chen-45a924221    AdenChen27

## Education

---

### University of Chicago

Sept 2023 – May 2027

*BA in Mathematics and Economics*

- GPA: 3.970/4.0
- Dean's List: 2023–2024
- Coursework: Honors Econometrics (ongoing), Honors Elements of Economic Analysis I–III (ongoing), Accelerated Analysis in  $\mathbb{R}^n$  I–III (ongoing), Statistical Theory and Methods Ia–IIa, Systems Programming II, Abstract Linear Algebra, Introduction to Mathematical Probability

## Research

---

### Research Assistant for Professors Shaoda Wang and Daniel Li Chen

Apr 2024 – present

*Becker Friedman Institute*

- Built a pipeline for crawling legal documents from court cases involving expert witnesses, collecting over 3M documents and metadata from 1.5M cases.
- Developed an extraction pipeline that uses large language models to identify key case variables, including outcomes, nature of suits, and expert witness affiliations.

### Research Assistant for the MiiE Lab

June 2024 – Sept 2024

*Becker Friedman Institute; Harris School of Public Policy*

- Supported Professor Anjali Adukia in her work to analyze images and texts in textbooks, children's books, and yearbooks using computational methods.
- Crawled public yearbook images and ran computer vision pipelines to estimate demographic compositions.
- Assisted in the development of a version of the Implicit Association Test using OpenSesame.
- Analyzed news articles using various natural language processing techniques, including sentiment analysis, power and agency analysis, and topic modeling.

### Student Researcher

Jan 2025 – present

*UChicago Mathematics Directed Reading Program*

- Studied measure theory, probability, and stochastic processes. Presenting on Kolmogorov's zero-one law.

### Apprentice Researcher

June 2024 – Sept 2024

*UChicago Mathematics Research Experience for Undergraduates (REU)*

- Studied operator theory and authored an [expository paper](#) on spectral theory and the min-max theorem, which gives a variational characterization of the discrete eigenvalues of a self-adjoint operator below the essential spectrum.

## Activities

---

### Oeconomica (Recognized Student Organization)

Sept 2023 – present

- Leader for the Asset Pricing Cohort (2024-2025); Member of the Econometrics Cohort (2023-2024).
- Designed and delivered a quarter-long lecture series on Python for economics research, covering fundamentals, data manipulation, visualization, regression analysis, causal inference, natural language processing, and web scraping. Created Jupyter notebook worksheets for hands-on Python practice. Presented lectures on mathematical prerequisites and a behavioral economics perspective on the equity premium puzzle.

### Grader for MATH15200 – Calculus 2

Sept 2024 – Dec 2024

### ESL Learning Website

[github repo](#)

- Developed a Django-based website for interactive ESL learning.
- Recognized as a finalist in the Rise Global Challenge by Schmidt Futures and the Rhodes Trust.

## Skills

---

**Languages:** Python, C++/C, R, JavaScript, HTML/CSS

**Technologies:** Git, Jupyter, Midway, L<sup>A</sup>T<sub>E</sub>X, Pandas, NumPy, Beautiful Soup, Selenium, SciPy, NLTK, Django