

(972)-809-3159
mitrayus@gmail.com

Ayus Mitra

Data Science

www.linkedin.com/in/ayus-mitra
Dallas, TX

- Python
- Stata
- Visualization
- Estimate

BIO

I am a final year Doctoral Candidate in the Economics Department at Southern Methodist University, with keen interests in data science and data analysis sector. I am an empirical economist and have worked with a variety of softwares and programming languages used for data cleaning, visualization and analysis. I am also proficient in various statistical and mathematical concepts.

EDUCATION

Doctor of Philosophy, Economics Southern Methodist University, Dallas TX, GPA: 3.76/4.00	Aug 2021 — May 2026
Master of Arts, Economics , Southern Methodist University, Dallas TX, GPA: 3.77/4.00	Aug 2021 — Dec 2022
Master of Science, Applied Economics , Presidency University, Kolkata, India, GPA: 8.30/10.00	Aug 2019 — July 2021
Bachelor of Science, Economics , Presidency University, Kolkata, India, GPA: 8.15/10.00	Aug 2016 — July 2019

PROJECTS

- Education Hypogamy and Household Gender-Relations in India**, Department of Economics, SMU **Jan 2025 — Present**
- Dissertation topic involved cleaning and merging national survey datasets of India with over 200,000 individuals, using Python.
 - Used non-parametric bounds estimation technique in Stata to estimate bounds on average treatment effects of spousal education gap on bargaining power.
 - Currently performing data visualization with matplotlib, running robustness checks and alternative estimations.
- Religious Majoritarianism and Crimes Against Women in India**, Department of Economics, SMU **Aug 2023 — May 2024**
- Coursework project involved cleaning and visualization of crime and election data from India, using pandas and matplotlib.
 - Used various difference-in-differences techniques in Stata to estimate the causal effect of popularity of political parties on gender violence in India.
 - Applied stochastic frontier models to correct for measurement error in the crime data.
 - Highly significant relationship found between popularity of extremist parties and violence against women, attributed to attitude changes in the society. ([Third Year Paper](#))
- Assortative Matching and Default Rates in Microfinance**, Department of Economics, Presidency University **Jan 2019 — May 2019**
- Coursework project with microfinance data in suburban India.
 - Observed default rates and loan repayment in microfinance groups.
 - Applied logit and probit regressions to check whether default likelihood depends on assortative matching on social parameters of the borrowers.

EXPERIENCE

- Research Assistant** for Human Trafficking Data Research Project **May 2023 — Aug 2023**
Southern Methodist University **Dallas, TX**
- Part of a \$1.187 million grant from the US Department of Justice, role focused on the study of the relationship between economics and human trafficking.
 - Tasks involved accessing and cleaning human trafficking data reported by National Incident-Based Reports System (NIBRS), visualising victims' data across different demographics.
- Data Analyst** (Intern) for Gender Norms and Women's Personal and Political Lives in Bihar, India **Sep 2020 — Oct 2020**
Model Resource Services Pvt Ltd. **Kolkata, India**
- Role involved extracting survey datasets on elected women representatives in rural governments of Bihar, India.
 - Performed visualization through different graphical and tabular representations.

SKILLS

- Coding** Intermediate proficiency in **Python, MySQL, R** and **Stata**. Also familiar with **SPSS**.
- Other Software** Intermediate Proficiency in **LaTeX, MS Word, MS Excel, Powerpoint**.
- Concepts** Probability & Statistics, Advanced Econometrics, Causal Inference, Time Series, Linear Algebra, Differential Calculus, Real Analysis.

SCHOLARSHIPS

- Provost's Doctoral Candidacy Fellowship**, Southern Methodist University **Aug 2023 – Present**
- Full Tuition Scholarship and Teaching Assistantship**, Southern Methodist University **Aug 2021 — May 2023**