# **ALIYAH BANERJEE**

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# **EDUCATION**

The University of Texas at Austin

May 2026

GPA: 3.9437 BSc Economics (Dept. Honors) Minor in French Studies Liberal Arts Honors Program University Honors/Dean's Honor List College of Liberal Arts Scholar

# **RELEVANT COURSEWORK (ECONOMICS, MATHEMATICS)**

Social Economics | Economics Statistics | Econometrics | Advanced Microeconomic Theory (Math Applications) | Macroeconomic Theory | Game Theory | Differential Equations | Linear Algebra | Discrete Math | Number Theory | Intro Real Analysis | Time Series Econometrics | Probability | Auction Theory | Math For Economists (PhD course)

#### **SKILLS & CERTIFICATIONS**

Technical experience: Stata & R (proficient), Python (beginner), SurveyCTO

Languages: Native Proficiency: English, Hindi, and Bengali, Full Professional Proficiency: French

#### RESEARCH INTERESTS

Game Theory | Development Economics | Social Choice Theory | Environmental Economics |

#### AWARDS/SCHOLARSHIPS

PREDOC Summer Fellowship, Harvard University Opportunity Insights

Undergraduate Research in Economics Fellowship, University of Texas at Austin

Fall 2023

Humanities Institute Faculty-Student Research Partnership Scholarship, University of Texas at Austin

Fall 2023

Immerse Research Scholarship, University of Cambridge

Outstanding Performance in French 320E and French 322E, University of Texas at Austin

Fall 2022-Spring 2023

#### RESEARCH EXPERIENCE/POSITIONS

# Carbon Border Adjustment Mechanisms | Research Assistant to Dr. Catherine Wolfram, MIT (ongoing)

Nov 2024-Present

- Analysed impact of country income-wise pricing strategy of CBAM as opposed to a flat price policy on developing countries such as Mozambique.
- Used R to model capacity usage variations across aluminium plants and model marginal costs in low income countries before and after CBAM.
- Performed quantitative data analysis to investigate if emissions intensity is connected to labor intensity in production, in aluminium, steel, and electricity production in low income countries.
- Analyzed labor shares in aluminum industry across countries of different income levels
- Aided during the drafting process of CBAM paper such as editing citations, calculating shipping emissions and emissions intensity.
- Currently working to identify other African countries with a similar advantage in carbon pricing as Mozambique.
- Drafted reports on steel industries in Ghana, Kenya, and Uganda to inform conversations with local policymakers.
- Designed powerpoints and edited models for presentations to government ministries in Ghana and other African countries.

# $\begin{tabular}{ll} \textbf{Post-Secondary Institutions and Quality of Life} & \textbf{PREDOC Researcher, Opportunity Insights} \\ 2024 & \end{tabular}$

Summer

- Investigated how the presence of post-secondary institutes can affect quality of life and health at the commuting zone level, and presented a project poster at the capstone research conference at the Federal Reserve Board in Washington, D.C.
- Worked with Opportunity Insights Health Inequality datasets and college datasets from Mapping Rural Colleges Database using Stata for regression and other empirical analysis.
- Cleaned and merged datasets before conducting regression analyses.
- Found presence of public colleges in commuting zones can improve life quality for women, amongst other findings.

# Haussmann Renovation Property Compensation | Research Assistant to Dr. Thomas Wiseman, UT Austin

Fall 2023

- Collected/interpreted data on property compensation, expropriation costs, and renovation juries in 19th century Paris, France.
- Used fluency in French to read and interpret government archival data and newspaper records during data collection.

- Selected for the project through application under the HI/IDH Faculty-Student Partnership Program.

# Solar Mini Grids in Rural India | Research Assistant to Economics PhD Candidate Margarita Petrusevich Spring-Fall 2023

- Collected and organized state-wise data on minigrid policies, implementation, and design in rural india.
- Researched quantitative data on subsidies and barriers to rural electrification from state publications, and translated from Hindi to English where needed.
- Selected for the project through application to the Undergraduate Research in Economics Fellowship.

# **Defense Offsets Country Coding | Research Affiliate to Government PhD Candidate Eoin Power, IPD Lab**

Spring

- Gathered yearly bureaucracy data for European countries since 1990 to explore how offset bureaucracy affects offset numbers and size.
- Translated research findings into quantitative data using binary coding.
- Selected through application to the Innovations for Peace and Development Lab.

# The Developing Economist Journal | Editor-in-Chief

Fall 2023-Present

- Serving as an executive board member and senior editor for The Developing Economist, UT Austin's undergraduate economics journal, one of the few published undergraduate economics journals.
- Reviewed submissions for annual issues, edited selected pieces in LaTeX to prepare for publication, and arranged for expert reviews on paper submissions.
- Selected from a competitive applicant pool to join the editorial team and later the executive board.

#### INDEPENDENT RESEARCH PROJECTS/PAPERS

#### Making It Official: Registration of Live-in Relationships and Bargaining under Uttarakhand's Uniform Civil Code

Fall 2025- Present

- Writing my Economics Honors Thesis as part of the departmental honors program, supervised by Dr. Maxwell Stinchcombe and Dr. Thomas Wiseman at UT Austin.
- Studying bargaining between couples in a live-in (cohabitation) relationship under Uttarakhand's new registration law for couples in India.
- Focusing on bargaining under imperfect information, exploring false promises of marriage, and increased surveillance of couples in a live-in relationship.

# SHG Membership and Decision-Making Independence Link

Summer 2024- Present

- Explored how decision-making independence can impact self-help group membership of young women in rural Uttar Pradesh.
- Adapted Houtenville and Conway's theoretical model to explain relationships between self help group membership, decision-making independence, caste, and religion.
- Used ground-level survey data from 10,000 households in two districts of Uttar Pradesh from the Harvard Dataverse to conduct quantitative regression analysis in Stata.
- Presented at the Missouri Valley Economic Association's 2024 + Southwestern Society of Economists' 2025 Annual Meetings
- Published in EconPress, Northeastern University's undergraduate economics journal.
- Independently undertaken, with guidance by Dr. Maxwell Stinchcombe at UT Austin.

#### "Virtual Buddy" Matching for Women's Safety Applications Link

Summer 2024- Present

- Exploring how one-sided matching theory can be applied to improve mobile application designs for women's safety apps in India.
- Working on a model of matching lone women travelers with each other in "virtual-buddy" pairings based on selected criteria, to minimize dangers in public places and give women a check-in partner to ensure safety.
- Researching issues with current safety application designs such as increase in domestic violence due to location-monitoring, illegal sale of user data, and barriers to usage of apps due to digital illiteracy.
- Using ChatGPT to elicit preferences of women users as per the characteristics they prefer in a virtual buddy pairing (location of buddy, age, etc).
- Published as an essay for the Stanford Economic Review (Stanford's undergraduate economics publication)

# Commentaires sur la pollution atmosphérique en Afrique (Commentaries on air pollution in Africa)

Fall 2024- Present

- Wrote a series of commentaries in French on ground experiments dealing with air pollution in African countries, as part of a supervised research course at UT Austin.
- Studied the impact of household air pollution on postnatal pneumonia and prenatal mortality in Ghana as reported by studies such as GRAPHS (Ghana randomized air pollution and health study), and impact of air pollution on historical architecture corrosion in Tunisia.
- Supervised by Dr. Herve Picherit at UT Austin.

#### ACADEMIC PRESENTATIONS

Annual Meeting 2025, Southwestern Society of Economists & Federation of Business Disciplines (Paper Presentation)

Annual Conference 2024, The Missouri Valley Economic Association (Undergraduate Paper Presentation)

October 2024

PREDOC Capstone Conference 2024, hosted by The Federal Reserve Board of Governors (Poster Presentation)

August 2024

# Undergraduate Teaching Assistant, Department of Economics, UT Austin

Spring 2024- Present

- Undergraduate TA for Professor Maxwell Stinchcombe in ECO 420S (Math Micro Theory) (Fall 2025)
- Undergraduate TA for Professor V. Bhaskar in ECO 354K (Game Theory) (Spring 2025)
- Undergraduate TA for Professor Dona Gonzalo in ECO 420K (Microeconomic Theory) (Fall 2024)
- Undergraduate TA for Professor Scott Carrell in ECO 304K (Introductory Microeconomics) (Spring 2024)
- Responsible for teaching discussion sections, holding weekly office hours, grading exams, aiding assignment creation.
- Offered TA position in UT Math Department for M361K, Introduction to Real Analysis (Professor Maria Gualdani)

#### **CREATIVE INTERESTS**

#### **Indian Classical Dance:**

- Professional Indian classical Kathak performer, choreographer, and teacher for 17+ years. Won national and international grants, scholarships, and choreography fellowships. Teaching around 100 students online under the Birju Maharaj Parampara Institute in New Delhi, India, the original and authentic institute worldwide for the dance form of Kathak.
- Performed internationally at venues such as New York Kathak Festival at the Alvin Ailey Theatre, Battery Dance Festival in Manhattan, festivals in San Diego, Colorado, Austin, as well as in New Delhi, Mumbai, and Bengaluru in India.
- Ongoing Medium blog about economics, classical dance, and mathematics.

**Writing:** Journalist and poet, with a published poetry compilation, several publications on the performing arts, and research/advocacy works on social issues.