Mario Arce Acosta (CV)

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Education

University of California, Davis, MS in Statistics — Sep 2025 – Present

University of California, Riverside, BS in Applied Mathematics/Economics — Jan 2023 – Jun 2024

- GPA: 3.76/4.0 (Cum Laude)

Riverside City College, AS in Physics for Transfer — Jun 2020 – Dec 2022

- GPA: 3.51/4.0

Riverside City College, AS in Science and Math — Jun 2020 – Dec 2022

- GPA: 3.51/4.0

Experience

Research fellow, University of California, Davis — Sep 2025 – Present

- Continuing a year-long research collaboration involving the training of machine learning algorithms, statistical analysis, and presentation of research on the education-occupation mismatch rates of undocumented college graduates
- Implementing efficient data collection practices through the automation of URL fetching and web scraping of public university course catalogs (bulletins) using Python
- Validating human classifications of university grading policies using open-source LLMs from Ollama

Statistical analyst freelancer, Upwork — Mar 2025 – Present

- Conducting statistical analyses through R and Stata for clients and their businesses and research spanning the fields of economics, business, and immigration
- Reviewing data analysis reports on business performance, and verifying statistics on Net Revenue Retention (NRR)
- Communicating with clients on project needs, timelines, and the direction of their work
- Consulting clients with strategy and advice on tackling business and research data-oriented problems

Data Analytics Intern, XCITE Center for Teaching and Learning, University of California – Riverside, CA — Apr 2023 – Oct 2024

- Cleaning and preparing data in spreadsheets with a concrete understanding of data and statistics fundamentals
- Investigated AI products such as Google Gemini and Notebook LM for potential academic use
- Organizing and analyzing data through Tableau, Looker Studio, and Google Sheets to inform decision-makers about which learning technologies and tools best improve and enrich the teaching and learning experience
- Built a data management strategy and wrote a Standard Operating Procedure document as requested, to implement guidelines for data governance and working procedures
- Automating tasks and workflows with Zapier after cleaning data to optimize environment
- Communicating with peers to prepare for and execute projects

Summer Research Fellow, Mind the Gap, University of California – Riverside, CA — Jun 2024 – Aug 2024

- Conducted research alongside professor/mentor using Stata to analyze and manage data
- Developed econometric models from extensive literature review on immigration policies affecting labor market outcomes in the United States
- Cleaned and prepared dataset consisting of millions of observations from the American Community Survey
- Used difference-in-differences, population weights, methodology for estimating hidden populations, cluster and fixed effects models, and robustness checks to estimate education-occupation mismatch rates and wage penalties of undocumented college graduates

Research

Using Machine Learning to Estimate the Effect of Undocumented Status on Education-Occupation Mismatch for College Graduates Jun 2024 - Present

Dr. Veronica Sovero, *Mario Arce Acosta*

Github Webpage

Projects

2025 Association for Public Policy Analysis and Management Conference Presentation Project Webpage

- Presented research to scholars and researchers at the 2025 Association for Public Policy Analysis and Management Conference in Seattle, Washington.
- Dr. Sovero and I refined our research on education-occupation mismatch of undocumented college graduates, preparing clean data visualizations and summaries of our findings
- Tools Used: Stata, IPUMS/ACS, Google Suite, LaTex, Github

2025 Population Association of America Conference Presentation Project Webpage

- Presented research to scholars and researchers at the 2025 Population Association of America Conference in Washington, D.C.
- Dr. Sovero and I refined our research on education-occupation mismatch of undocumented college graduates, preparing clean data visualizations and summaries of our findings
- Tools Used: Stata, IPUMS/ACS, Google Suite, LaTex, Github

Research Symposium Poster Project Webpage

- Developed a poster summarizing my research findings and efforts made through a 3 month research fellowship at UCR
- Along with my mentor, I continued this line of research, which involved the following work: working with ACS data from IPUMS, conducting an extensive literature review on education-occupation mismatch and economic barriers to undocumented workers, creating indicators for education-occupation mismatch, building differences-in-differences and event study regression models, and incorporating population weights into the models
- Tools Used: Stata, IPUMS/ACS, Google Suite, Github

XCITE Center for Teaching and Learning LTI Dashboards Project Webpage

- This was a year-long project where I was tasked with gathering, cleaning and preparing, and analyzing data which I then displayed through Google Looker Studio report dashboards
- Tools Used: Google Looker Studio, Google Suite, Spreadsheets, Asana, Slack, Zoom, Zapier

Business Analytics course independent research project on H-1B sponsors Github Repo

- I gathered data from the United States Citizenship and Immigration Services (USCIS) webesite on all the H-1B sponsors for the year 2015. I created a regression model to examin correlation between industry and approval rates.
- Tools Used: RStudio, Spreadsheets, Github

Econometrics course independent research project on Airbnb prices in Mexico Github Repo

- I extracted data from Kaggle, originally sourced from a mission based project named Inside Airbnb, and then constructed an econometric model relating the log price of an Airbnb with like availibility and minimum night requirements.
- Tools Used: RStudio, Spreadsheets, Github

Technologies

Programming Languages: R, Stata, Python

Software: RStudio, VS Studio, Google Looker Studio, Google Workspace, Microsoft Office, Github, PyCharm, Octoparse, Zapier
Languages: English, Spanish