

Mario Arce Acosta (CV)

Davis, CA | maarceacosta@ucdavis.edu | Professional website | LinkedIn |

Upwork | Github

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
<ul style="list-style-type: none">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 graduatesImplementing efficient data collection practices through the automation of URL fetching and web scraping of public university course catalogs (bulletins) using PythonValidating human classifications of university grading policies using open-source LLMs from Ollama	
Statistical analyst freelancer , Upwork	Mar 2025 – Present
<ul style="list-style-type: none">Conducting statistical analyses through R and Stata for clients and their businesses and research spanning the fields of economics, business, and immigrationReviewing 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 workConsulting 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
<ul style="list-style-type: none">Cleaning and preparing data in spreadsheets with a concrete understanding of data and statistics fundamentalsInvestigated AI products such as Google Gemini and Notebook LM for potential academic useOrganizing 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 experienceBuilt a data management strategy and wrote a Standard Operating Procedure document as requested, to implement guidelines for data governance and working proceduresAutomating tasks and workflows with Zapier after cleaning data to optimize environmentCommunicating with peers to prepare for and execute projects	
Summer Research Fellow , Mind the Gap, University of California – Riverside, CA	Jun 2024 – Aug 2024
<ul style="list-style-type: none">Conducted research alongside professor/mentor using Stata to analyze and manage dataDeveloped econometric models from extensive literature review on immigration policies affecting labor market outcomes in the United StatesCleaned and prepared dataset consisting of millions of observations from the American Community SurveyUsed 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.com/Newtrino0/Undocu_Mismatch_Wage_Research_2024

Projects

2025 Association for Public Policy Analysis and Management Conference Presentation

github.com/Newtrino0

- 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

github.com/Newtrino0

- 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

Summer Research Poster

sites.google.com/Mario

- 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

sites.google.com/Mario

- 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

XCITE Center for Teaching and Learning LTI Annual Report

sites.google.com/Mario

- Once a database was established on all Learning Tools Interoperability (LTI), I developed a report spanning an academic year with key metrics and usage of the the learning tool by faculty and staff.
- Tools Used: Google Looker Studio, Spreadsheets, Asana, Slack

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

github.com/Newtrino0

- I gathered data from the United States Citizenship and Immigration Services (USCIS) website 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.com/Newtrino0

- 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 availability 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