Alejandro M. Ouslan

(787) 951-6131 | alejandro.ouslan@upr.edu | linkedin.com/in/ouslan | github.com/ouslan

EDUCATION

M.S. in Statistical Mathematics

Mayagüez, PR

University of Puerto Rico, Mayagüez GPA: 3.36

Aug. 2024 - Expected May 2026

AEA Summer Program

Washington, DC

Howard University GPA: 3.75

May 2025 - Jul. 2025

B.A. in Economics

Mayagüez, PR

University of Puerto Rico, Mayagüez GPA: 3.50

Aug. 2019 - May 2024

AWARDS & PUBLICATIONS

Economic Report for the Governor 2023

May 2024

Puerto Rico Planning Board

San Juan, PR

- Calculated the Human Development Index (HDI) for Puerto Rico (2012–2023) and contributed a chapter to the Economic Report for the Governor 2023.
- Used data from the IPUMS
- Report link: jp.pr.gov/.../IEG2023-OCE-SA-2024-08598.pdf

Best Graduate Research, Symposium on Applied Economics

June 2025

University of Puerto Rico, Mayagüez

Mayagüez, PR

- Awarded 2nd place for best graduate research.
- Analyzed the effects of minimum wage changes on employment in foreign versus domestic businesses. Found varying impacts across NAICS sectors, with domestic businesses experiencing a reduction in employment and foreign businesses facing a stronger negative impact.
- Used uncensored QCEW data from the BLS and applied a Bayesian panel regression with fixed effects to estimate the posterior coefficients of the minimum wage on employment.

Medal of the Department

May. 2024

University of Puerto Rico, Mayagüez

Mayagüez, PR

• Recognized for excellence in undergraduate research and maintaining a GPA above 3.5.

X International Conference in Statistics and Operational Research

July 2023

University of Salamanca

Salamanca, Spain

- Published work on the importance of utilizing advanced tools like Python and SQL in academic research.
- DOI: doi.org/10.14201/0AQ0368

EXPERIENCE

Puerto Rico Planning Board

Jan. 2024 – Jul. 2025

Lead Developer

Mayagüez, PR

- Led a 15-person team to develop data pipelines for key economic indicators.
- Utilized Django for the frontend and FastAPI for the backend.
- Developed API endpoints to download data from sources such as USA Spending, PR Department of Labor, Census Bureau, PR Planning Board, PR Statistics Institute, Luma Energy, and BLS.
- Automated data ingestion into SQL databases on a monthly, quarterly, and yearly basis.
- Developed CI/CD pipelines using GitHub Actions to package modules as pip packages, bundle the project with Docker, and deploy to a hosted Nix server.

Food Security Data Center (SEA), UPRM

Sept. 2023 – Jul. 2025

Lead Developer

Mayaqüez, PR

- Led a team of 5 engineers to develop web platforms for the Experimental Agricultural Station (SEA).
- Used IPUMS data to calculate caloric intake by county in Puerto Rico and create interactive maps.
- Developed automation tools for extracting and reporting food establishment data from the QCEW.

Agricultural Coffee Survey (SEA), UPRM

Mar. 2024 - Jul. 2025

Lead Developer

Mayaqüez, PR

- Led a team of 5 engineers to develop digital survey tools for collecting field data from farmers.
- Built automation tools to ingest survey data and produce automated reports.

AEASP, Howard University

May 2024 - Jul. 2024

AEA Scholar

Washington, DC

- Conducted research with the U.S. Census Bureau on travel time and road infrastructure.
- Applied spatial regression to assess regional disparities across U.S. PUMAs (2012–2019).

LEADING Hispanics, USDA

Sept. 2023 – Aug. 2024

Research Assistant

 $Mayag\ddot{u}ez,\ PR$

- Analyzed the correlation between food deserts and chronic disease prevalence, finding a positive correlation between proximity to food deserts and higher cancer mortality rates.
- Applied a Bayesian Spatial Durbin Model using uncensored QCEW data from the BLS.
- Evaluated spillover effects using spatial econometrics.

RUMbo EX, UPRM

Sept. 2023 – Jan. 2024

Statistics and Economics Tutor

Mayagüez, PR

- Tutored undergraduate students in Microeconomics, Macroeconomics, Econometrics, pre-Calculus I & II, Calculus I, Statistics I & II, and Engineering Economic Analysis.
- Led personalized one-on-one and group sessions with tailored study plans. Prepared simulated exams on for the Calculus

L'SPACE HYDROS, NASA

Jan. 2020 – May 2020

Intern

 $Mayaq\ddot{u}ez, PR$

- Collaborated with engineers to design a lunar drone for water extraction and prepared a project proposal.
- Managed the project's budget, ensuring costs remained below \$10 million.

EXTRACURRICULAR ACTIVITIES

University of Salamanca

Mar. 2023

 $Guest\ Lecturer$

Salamanca, Spain

- Delivered a workshop on Data Science and Research Automation for political science students.
- Taught web scraping and API integration in Python to create reproducible reports.

Economics Student Association

Aug. 2021 – Jun. 2022

Treasurer

 $Mayag\ddot{u}ez, PR$

- Managed the association's budget and tracked expenditures.
- Organized fundraising events to support student activities and conferences.

Student Money Association

Sept. 2019 - Jun. 2022

Student Advisor

 $Mayag\ddot{u}ez, PR$

- Assisted students in developing personalized budgets and improving financial literacy.
- Promoted campus-wide awareness of responsible money management.

SKILLS & INTERESTS

Skills: Python, Rust, R, STATA, LATEX, SQL, Git, Machine Learning, GIS, GAM, Docker, DevOps, Nix, PyMC

Interests: Macroeconomics, Spatial Econometrics, Bayesian Inference, Time Series Analysis, Causal Inference