José Bayoán Santiago Calderón

Education

2019	PhD Economics	Claremont Graduate University
2015	MA Economics	Claremont Graduate University
2014	BA Economics	Southwestern University

Appointments and Employment

Research Economist · Full-time

Analysis & Research Group

National Economic Accounts Directorate

2021 - Present

U.S. Bureau of Economic Analysis

Working on topics related to the digital economy and measuring intangible assets (e.g., software, data).

Sr. Scientist II · Contract

Pumas-AI 2018 – Present

Work on the development of components for the pharmaceutical modeling and simulation platform and in the consulting services branch for statistical analysis.

Postdoctoral Research Associate · Full-time

Social & Decision Analytics Division

Biocomplexity Institute & Initiative

2019 - 2021

University of Virginia

Worked on multiple projects with government partners including:

- National Center for Science and Engineering Statistics (NCSES)
 - Measuring the Scope and Impact of Open Source Software
 - Skilled Technical Workforce
- Defense Advanced Research Projects Agency (DARPA)
 - Computational Simulation of Online Social Behavior (SocialSim) Summary
- Arlington County Police Department (ACPD)
 - Evaluation of the Arlington Restaurant Initiative

Assisted the infrastructure team on helping the team best use UVA computing resources (e.g., high-performance computing) and best practices (e.g., version control). Served as project lead and instructor for the Data Science for the Public Good Young Scholars Program (DSPG).

Data Scientist · Contract

Residential Energy and Water Intelligence (Res-Intel)

2016 - 2018

Conducted a program evaluation of the California Advanced Home Program (CAHP) commissioned by Southern California Edison and developed the module for residential benchmarking.

Dissertation

José Bayoán Santiago Calderón. 2019. "On Cluster Robust Models." PhD diss., Claremont Graduate University. DOI: 10.5642/cguetd/132

Selected Research

- J. Bayoán Santiago Calderón, Guci Ledia, Gizem Korkmaz, Carol A. Robbins, and Brandon L. Kramer. 2022b. Valuing the U.S. Data Economy Using Machine Learning and Online Job Postings. WP2022-13. Washington, DC: Bureau of Economic Analysis.
- J. Bayoán Santiago Calderón, Guci Ledia, Gizem Korkmaz, Carol A. Robbins, and Brandon L. Kramer. 2022a. Measuring the Cost of Open Source Software Innovation on GitHub. WP2022-10. Washington, DC: Bureau of Economic Analysis.
- Christopher Vincent Rackauckas, Yingbo Ma, Andreas Noack, Vaibhav Dixit, Patrick Mogensen, Simon Byrne, Shubham Maddhashiya, José Bayoán Santiago Calderón, Joakim Nyberg, Jogarao V.S. Gobburu, and Vijay Ivaturi. 2020. Accelerated Predictive Healthcare Analytics with Pumas, A High Performance Pharmaceutical Modeling and Simulation Platform. Preprint. Pharmacology and Toxicology. DOI: 10.1101/2020.11.28.402297
- José Bayoán Santiago Calderón. 2020. "Econometrics.jl." *Proceedings of the JuliaCon Conferences* 1 (1): 38. DOI: 10.21105/jcon.00038