

Daniel Sánchez

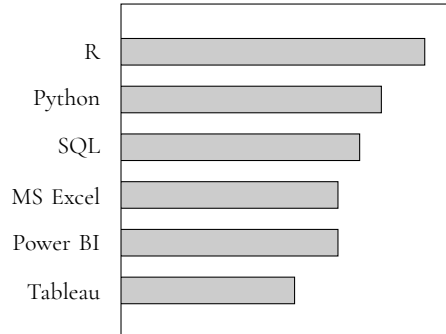
DATA ANALYTICS · CAUSAL INFERENCE · APPLIED FINANCE

🏠 Burnaby, BC ✉ dsanchezp998@gmail.com

☎ +1 236 308 8801 in LinkedIn 🐦 Twitter 🏠 Personal Website 📄 GitHub 📰 RPubS

SUMMARY

- Data analyst and applied researcher with interests in causal inference, causal machine learning and financial econometrics.
- Advanced skills in building transformation, analytics and visualization pipelines using R, Python, SQL and Power BI.
- **Languages:** English (advanced, TOEFL 119/120), Spanish (native), French (basic).
- Project portfolio hosted on personal website.



EDUCATION

- Aug. 2022 – Apr. 2024 **M.A. Economics** SIMON FRASER UNIVERSITY, BURNABY, BC, CANADA
Awarded full funding among 100+ applicants. GPA 3.89/4.33.
- Jan. 2017 – May. 2022 **B.A. Economics, B.A. Finance** (magna cum laude) UNIVERSIDAD SAN FRANCISCO DE QUITO, ECUADOR
Double majored in Economics & Finance. GPA 3.82/4.00 (EC) & 3.81/4.00 (FI). Attended **Michigan State University** for one academic year exchange (2019/2020) **on full funding**, GPA. 3.9/4.0.

SELECT INDUSTRY EXPERIENCE

- Aug. 2022 - Present Teaching Assistant SIMON FRASER UNIVERSITY, BURNABY, BC, CANADA
· TA for Economic Development (Spring 2024 & 2023), Principles of Microeconomics (Summer 2023) and Money and Banking (Fall 2022) as a part of a full funding package in SFU MA program.
· Coordinate with professors and co-TAs to prepare class seminars, create and grade assignments and exams for 200+ students per semester.
· Holding one-hour seminars to 20+ students four times a week, teaching complicated quantitative concepts, reviewing written contents and working with students during weekly office hours.
- Jun. - Dec. 2023 Junior Data Analyst NATURAL RESOURCES CANADA, OTTAWA, CANADA (REMOTE FULL TIME)
· Co-op student at NRCan's Innovation Branch in the Clean Technology Economic Analysis Unit, supporting economic, financial and statistical analysis of the clean technology sector for the implementation of business-oriented policy.
· Produced data analysis, reporting and visualization pipelines with R, Python and Power Query/Mashup, following industry standards for code formatting, connecting to APIs for data access using *statcanR*, *wbgapi*, *rvest*, Bloomberg, PitchBook, S&P Capital IQ, among others.
· Developed 5+ Power BI and Tableau dashboards to be deployed in the team's website. Documented programs, scripts and dashboards for future use, focusing on reproducibility and best coding practices.
· Created and presented reports to top officials in the organization, implementing dynamic updating using R and Python pipelines with RMarkdown, Quarto and Jupyter.
- May 2022 - April 2023 Data Analyst MILMOH, S.L., VALENCIA, SPAIN (REMOTE PART-TIME)
· Transformed, analyzed and visualized data with Power BI, Tableau and R, creating 20+ dashboards and 50+ analytical/reporting pipelines for a Europe-based data analytics consulting company
· Managed and structured data models with PostgreSQL to deploy and maintain assets in Power BI, Tableau and R, implementing coding best practices.
· Reviewing and improving prior company assets in SQL and Power BI, validating existing methods with evolving expectations and new methodologies. Developed periodic reports, product documentation and result presentations in **a client-facing team**.

Last updated December 24, 2023. Developed using L^AT_EX markup and *pgfplots/tikz* visualization. Source code made available on GitHub.

SKILLS

· MULTIPURPOSE SCRIPTING: **R** (3+years): *base*, *tidyverse*, *infer*, *ranger*, *caret*, *survey*, *tidymodels*, *tidytext*, etc.
Python (1 year): **pandas**, **numpy**, **polars**, **scipy**, **xgboost**, etc.
 · DATA SCIENCE/ECONOMETRICS: **supervised learning** (logit/probit classification, decision trees, random forests, regression (OLS), GAMs, GMM, GLS, gradient boosting, etc.), **unsupervised learning** (clustering, PCA, k-means, etc.), statistics (hypothesis testing, confidence intervals, ANOVA, experimental design, bootstrapping, sampling, surveys, etc.), **causal inference modelling** (A/B testing, IV/TSLs, difference-in-differences, regression discontinuity, randomized control trials, matching, synthetic control, etc.)
 · DASHBOARDING & VISUALIZATION: **Power BI** (1 year), **Tableau** (1 year), *shiny/flexdashboard*, *ggplot2*, *plotly*, *dygraphs*, *highcharter*, **matplotlib**, **seaborn**.
 · DATA MANAGEMENT & MANIPULATION: PostgreSQL & SQL Server (1 year) *Power Query*, *Mashup*, *dplyr*, *tidyr*, *zoo*, *lubridate*, *stringr*, *XLConnect*, *openxlsx*, **pandas**, **polars**, *data.table*.
 · DOCUMENT MARKUP: **LaTeX**, **Quarto**, **Markdown**, **RMarkdown**, *knitr*, *sweave*.
 · OTHERS: **Git**, **GitHub**, **Unix**, **MS Office**, **Stata**, **Minitab**, **IBM SPSS**, **MATLAB**, **VBA**. API access using *selenium*, *quantmod*, *wbstats*, *Quandl*, *spotifyr*, *geniusr*, *lastfmR*, **yfinance**, **wbgapi**, etc.

PUBLICATIONS

PEER-REVIEWED

1. Sánchez Pazmiño, D. (2023). Honesty by Convenience: Corruption Tolerance in Ecuador. In *The Philosophy, Politics and Economics Review*.
<https://pressbooks.lib.vt.edu/app/uploads/sites/47/2023/03/PPER-Volume-2-2023.pdf>.
2. Sánchez-Pazmiño, D.H. (2022). Immunizing the Economy: A Causality Discussion on Vaccines and Economic Recovery¹. In *X-Pedientes Económicos*.
<https://daniel-ec.netlify.app/files/research/immunizing-the-econ.pdf>.

MEDIA

1. Quijano, A. & **Sánchez, D.** (2023). Homosexuality: what do Ecuadorians think about it? (In Spanish). ISSN 2953-6456. [🔗](#)
2. Marchán, A. & **Sánchez, D.** (2023). Three problems for the quantitative analysis of femicides in Ecuador (In Spanish). ISSN 2953-6456. [🔗](#)
3. Sánchez, D. (2022). A quantitative perspective on the Ecuadorian protests (In Spanish). ISSN 2953-6456. [🔗](#)

ADDITIONAL EDUCATION

Oct. 2023	Understanding and Visualizing Data with Python	COURSERA (UNIVERSITY OF MICHIGAN)
Oct. 2023	Python Fundamentals (skill track)	DATA CAMP
Sept. 2023	Data Scientist Professional with R (career track)	DATA CAMP
Mar. 2023	Introduction to Stata 15	LINKEDIN LEARNING
Nov. 2022	Simon Fraser University Data Fellowships: AI Essentials	SFU BIG DATA HUB
May 2022	Intermediate SQL	DATA CAMP
May 2022	Power BI & Tableau Fundamentals (skill tracks)	DATA CAMP

RESEARCH AFFILIATIONS

Jun. 2022 - present	Research Associate	ECUADORIAN RESEARCH DEVELOPMENT LAB, GUAYAQUIL, ECUADOR
	· Co-authorship of research papers with organization members, including a work in progress to be submitted to <i>The Gerontologist</i> . · Established the first DataCamp Donates partnership in Ecuador. DC Donates provides free data education to disadvantaged individuals and communities through partners. · Assisting in the implementation of projects, including US Embassy financed, <i>New Dimensions</i> (business intelligence education for women) and the upcoming US Embassy-financed <i>Young Researchers Fellowship</i> . · Reviewer for the organization's blog-type website <i>El Quantificador</i> , developed in an R/Hugo environment.	

¹See this link for original journal publication.