

Mélany A. Gualavisí Diaz

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Qualifications Profile

Technically astute and highly analytical, applied economist with substantial experience in data analysis as well as the application of causal inference methodologies for projects related to labor and development fields.

Impressive career record of conducting studies in the labor and development fields generated through comprehensive data analysis based on empirical evidence and theoretical framework. Solid technical abilities in designing, testing, and implementing causal inference methodologies as well as machine learning techniques. Well-established capacity to advise executive leadership on strategic planning and implications of policy decisions. Credible experience in both quantitative and qualitative research in the consultancy industry. Recognized for operating with a strong sense of thoughtfulness, care, and attention to detail. Strong communicator, detailed analyst, and effective multitasker with a proven ability to succeed in the field.

Technical Proficiencies

Software: Stata (Advanced), Python (Intermediate), R (Intermediate), SQL(Intermediate)
Skills: Causal Inference, Data Analysis, Machine Learning,

Areas of Expertise

◆ Labor & Development Economics ◆ Applied Micro Econometrics ◆ Causal Inference

Career Experience

Amazon, (remote)
Summer Intern

2022 – 2022

Estimated forward-looking models, leveraging machine learning methods (LASSO, Random Forest, Logistic regression) to support inventory, purchase, and production decisions.

- Proposed a model capable of minimizing the prediction error by 23-30% of key outcomes used in models to make inventory, purchase, and production decisions.
- Demonstrated exceptional learning skills of data analysis tools (SQL, Python), machine learning, analytical and writing.

World Bank, (remote)
Consultant

2020 – 2022

Conducted research related to education and poverty topics for developing countries.

- Combined traditional data (survey and census data) with geospatial data to identify vulnerable population in Malawi to help targeting of social programs and policies.
 - Utilized solid machine learning (LASSO, XGBoost), data analysis, writing, and analytical skills.
 - Drove significant enhancements that enabled The World Bank's Malawi project became a working paper.
- Examined the implications of Venezuela's economic crisis on the educational sector from 2016-2019.
 - Highlighted the evolution of the returns to education over time and the intergenerational persistence in education.

Inter-American Development Bank, Washington, DC
Research Fellow - Labor Markets & Social Security Division

2014 – 2017

Ensured effective management of Labor Markets and Social Security Division's information system to enable the organization understand and comprehend all of the available information. Updated and harmonized the labor market indicators of 21 countries using survey data. Harmonized and analyzed labor market indicators using surveys and public records.

- Facilitated the launch of the first version of information system for labor market and social security division, delivering exceptional support in the design and inputs.

- Link to the webpage: <https://www.iadb.org/en/sector/social-investment/sims/sims-institutions>.
- Leveraged analytical inputs for several publications by conducting extensive data analysis; and coauthored articles based on two of the analyses:
 - “Jobs for Growth” <https://publications.iadb.org/handle/11319/7203>
 - “Measuring the Cost of Salaried Labor in Latin America and the Caribbean” <http://dx.doi.org/10.18235/0000758>
 - Collaborated on the joint publication OECD/IDB “Taxing Wages in Latin America and the Caribbean” http://www.oecd-ilibrary.org/taxation/taxing-wages-in-latin-america-and-the-caribbean-2016_9789264262607-en

Secretary of Planning, Ecuador Technical Advisor

2012 – 2013

Coordinated and supervised two impact evaluations of social initiatives connected to labor market regulations that provided first time evidence on the effects of policies. Impact assessment included “My first employment” and “Professional training to employees”.

- Supervised and provided technical inputs for 4 additional impact evaluation designs (ready to be implemented).
- Exhibited causal inference, analytical, and public speaking skills.

Research Experience

University of Illinois at Urbana-Champaign, Champaign, IL Research Assistant

2019 – Present

- Networks in the Academic Labor Market: Conducted comprehensive research and analysis on how relocation events of full professors in Economics affect productivity and promotion outcomes of associated networks at origin and destination institutions (co-authors: Marieke Kleemans and Rebecca Thornton).
- Effects of emigration on labor market outcomes (evidence from Indonesia): Analyzed the effects of migration on the labor market outcomes of the non-migrant population in the locations left behind (co-author: Marieke Kleemans).
- Skills: Causal inference: instrumental variable approach, event study, and difference in difference approach.

Education

Ph.D. in Economics

University of Illinois at Urbana-Champaign, IL, (Anticipated completion in 2023)

Master in Development Economics

Latin American Faculty of Social Sciences, Quito, Ecuador, 2012

Professional Development

- Applied Social Network Analysis in Python, University of Michigan offered by Coursera (2022)
- R programming, Johns Hopkins University through Coursera (2020)
- Statistical learning, UIUC. Focused on formulating a variety of machine learning algorithms and solving them using numerical optimization (2020).
- OPHI Summer School on Multidimensional Poverty Analysis, Beijing-China (2016).
- MIT-JPAL- edX Verified Certificate for Evaluating Social Programs (2015).
- Theoretical-practical course on labor markets, poverty and inequality at CEDLAS in the National University of La Plata in Argentina (2012).

Languages

English – Proficient | Spanish – Native | French – Basic