

Juan Diego Heredia Niño

[LinkedIn](#) | +57 (316) 0435259 | [Web Page](#) | juandiegoheredianino@gmail.com

PROFILE

Master's student in Economics and Economist from Universidad de los Andes. Interests focused on the application of quantitative methods, such as statistics and machine learning, in both academic and operational research. Areas of interest include data analysis/science, applied macro/microeconomics, and machine learning. Skilled at working in teams in an organized way, solving problems under pressure, and handling large datasets with precision and attention to detail. Service-oriented with effective communication skills.

WORK EXPERIENCE

Research Assistant – Fedesarrollo

March, 2025 – Present

- Conduct empirical research on the opportunities and challenges of nearshoring for Colombia in strategic export sectors.
- Built international trade databases (exports and imports since 1996) using UN COMTRADE and ITC (International Trade Centre) with Python.
- Developed automated web scraping tools to extract export projections from ITC's online tool, improving the efficiency of data collection and analysis.
- Created interactive visualizations and technical documents for public policy presentations.

Research Assistant – Universidad de los Andes

May, 2024 – Present

- Performed data analysis and econometric modeling on crime-related topics under the supervision of Prof. Daniel Mejía (PhD, Brown University).
- Led a consulting project for the National Business Council as part of the Security Observatory, where:
 - Updated and enriched a national and regional security indicators database, integrating official and sectoral sources using Python and SQL.
 - Produced monthly reports for business associations, analyzing crime data and key indicators by region, and developed interactive Python visualizations.
 - Contributed to the drafting of public policy documents and technical recommendations based on the observatory's findings.
- Applied advanced statistical analysis and network theory in research projects under the supervision of Prof. Tomás Rodríguez (PhD, Stanford University).
- Supported the preparation of academic articles and presentations, including the visualization of complex data structures.

Data Analyst - Rappi

August, 2022 - January, 2024

- Generated descriptive statistics, visualizations, and statistical analysis to understand failed orders in the operations vertical using SQL (Snowflake), Python, Excel, and Power BI.
- Developed a natural language processing model using Python to classify text through tokenization and vectorization, applying a Random Forest algorithm.
- Designed a model to detect product theft, user fraud, and delivery scams using Levenshtein distance and text tokenization with SQL and Python.

Automation Developer - IBM

March, 2022 - August, 2022

- Developed Robotic Process Automation (RPA) solutions using IBM RPA Studio to automate data extraction and processing from web applications and sites.
- Gained international experience working in multicultural and bilingual teams.

Data Science and Automation Intern - IBM

August, 2021 - February, 2022

- Created an ETL process through web scraping using Python to process 10 variables across 700,000 products from three different supermarket chains. The cleaned dataset was used by the Senior team for market analysis in the retail sector.
- Supported the evaluation of a partnership with the Center for the Fourth Industrial Revolution through information synthesis and documentation.

EDUCATION

Master's in Economics

Universidad de los Andes - Bogotá, Colombia
Faculty of Economics

January, 2024 – Present

GPA: 4.20/5.00

Economist

Universidad de los Andes - Bogotá, Colombia
Faculty of Economics

2018 – 2023

GPA: 4.08/5.00

TEACHING EXPERIENCE

Adjunct Lecturer – Data Analysis and Big Data

Universidad de los Andes – Continuing Education

May, 2024 – Present

Undergraduate Teaching Assistant – Macroeconomics II

Professors: David Pérez Reyna (PhD, University of Minnesota) and Andrés Zambrano (PhD, UCLA)

August, 2020 – June, 2022

Undergraduate Teaching Assistant – Labor Economics and Macroeconomic Facts

Professor: Luis Eduardo Arango Thomas (PhD, University of Liverpool)

August, 2021 – December, 2021

ACTIVITIES

Cultural and Language Exchange

Education First International Campus – San Diego, United States

2020–2021

Macroeconomics Research Group

Universidad de los Andes – Bogotá, Colombia

2020–2021

Supuestos Student Journal

Universidad de los Andes – Bogotá, Colombia

2020

SKILLS

Software:

Advanced: Office tools (Google & Microsoft), Python, SQL

Intermediate: Matlab, R, L^AT_EX

Basic: Stata, Power BI (DAX)

Languages:

Spanish (Native), English (C1)