

## Daniel Esteban González Zuluaga

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### About Me

Hello, I am Daniel González. I am an efficient and versatile person with quick learning skills and a strong team-oriented disposition. With 3 years of experience in automation and ETL development, I have extensively worked with Python, using libraries such as Pandas, NumPy, API libraries, and openpyxl, among others. My interest in data science, statistics, and predictive models has led me to specialize in these areas, where I apply my knowledge to extract valuable insights and optimize business processes. My proficiency with tools like SQL, linux and Git complements my skills, providing valuable knowledge and contributions to business intelligence and artificial intelligence projects.

### Education

#### Bachelor's degree

**Pontificia Universidad Javeriana**

Electronic Engineer

Bogotá, Colombia

Jan 2015 - May 2021

Certification: <https://wallet.xertify.co/certificates/FEF6DA2DA001?r=1>

#### Master's degree

**Pontificia Universidad Javeriana**

Master's Degree in Analytics for Business Intelligence

Bogotá, Colombia

Jan 2024 - July 2025

Focus: Advanced knowledge in data analysis and its strategic application for business decision-making. The program covers a variety of predictive models, such as regressions, decision trees, and clustering, among others. Also covers key performance indicators (KPIs) and MBA-related topics, providing a solid foundation in business strategy and management.

#### Double Master degree

**Pontificia Universidad Javeriana**

Master's Degree in Artificial Intelligence

Jan 2024 - July 2025

Focus: Specialized in advanced machine learning techniques, natural language processing, and computer vision. Proficient in tools such as Python, TensorFlow, and PyTorch for developing predictive models and data analysis. Skilled in designing and optimizing AI algorithms to solve complex problems across various industries.

### Work experience

#### BBVA

**Software Engineer internship**

Bogotá, Colombia

July 2020 – December 2020

- Collaborated and assisted in development projects for the BBVA mobile application.
- Enhanced customer data encryption protocols and implemented multi-factor authentication, reducing unauthorized access incidents and boosting customer trust and satisfaction scores.
- Co-created the "trusted device verification" functionality, currently in use in the mobile application.

- Implemented measures to detect if a login on a device is trustworthy, preventing scams and fraud.
- Used JAVA and C programming languages for the development of this functionality.

**Csg international  
Technical Analyst**

Bogotá, Colombia  
June 2021 – Present

- Managed the billing process for telecommunications companies in the United States with software of CSG.
- Analyzed large volumes of data from Excel spreadsheets, PDFs, and CSG applications using Python.
- Automated manual processes using Python, increasing operational efficiency.
- Developed and maintained internal applications, ensuring they are regularly updated and fully operational, using SQL and JAVA.
- Managed and updated the project database using Oracle SQL and PostgreSQL.
- Fixed software errors, improving system stability and performance.
- Co-created two Python applications to automate processes, saving at least one day of manual operations weekly.
- Successfully implemented these applications across the area, optimizing workflows and reducing processing time in a 60 % for a billing Analyst, saving resources on the area.

### **Projects and Activities**

#### **Live streaming of driving states in Transmilenio:**

Utilizing the Internet of Things (IoT) with Python and Firebase to measure the driving quality of Transmilenio. Data processing was performed in Python, data transmission was handled by a microprocessor, and data was received in Firebase to be displayed on a web page created with Bootstrap.

#### **Banking Model for Customer Segmentation using Clustering**

Developed a comprehensive marketing model for a bank using the CRISP-DM methodology. Conducted in-depth data analysis on customer credit transactions to design targeted marketing strategies. Implemented K-Means clustering and Principal Component Analysis to segment customers, enabling personalized marketing efforts. Improving customer retention and increased transaction values through data-driven decision-making.

#### **Marketing Model for telephone company Using CRISP-DM Methodology**

Developed a marketing model using the CRISP-DM methodology, focusing on customer retention through data analysis. Implemented advanced machine learning techniques like XGBoost to predict customer churn probability, achieving an AUC above 70%. Designed personalized retention strategies based on customer clustering, resulting in a projected net gain of 1,974,124,590 COP. The project implementation included analyzing key variables such as age, billing, and default, optimizing marketing resources and increasing the effectiveness of retention campaigns.

To view some of my projects, you can visit my website:  
<https://danielgonzalez.com/>

### **Skills and interests**

**Technical:** Python, R, Domo, Git, SQL.

**Languages:** Spanish, English.

**Soft skills:** Responsibility, Innovation, Teamwork, Communication.

**Data apps:** AWS, Databricks, Spark