

Sebastian David Pinzon Zambrano

Valledupar, Cesar · (57) 318-6087347 · spinzonzambrano@gmail.com · [LinkedIn](#) · [Github](#)

Experience

2023-2024 Imperio del Plastico

Valledupar, Cesar

Data Analyst

- Conceived and deployed advanced data analytics solutions using Python, R, SQL, and Excel, streamlining financial and operational workflows to reduce costs by 12%.
- Engineered predictive models and time series forecasting tools that refined forecast accuracy by 15%, empowering strategic planning and executive decision-making.
- Constructed robust ETL pipelines and simplified data cleaning frameworks that transformed raw data into actionable insights, boosting operational efficiency in accounting and finance by 63%.
- Directed the development of intelligent workflows and executed reporting systems with Python and SQL, increasing team productivity and reducing manual effort by 20%.
- Launched a profitable grill manufacturing startup in under three months by overseeing business model design, comprehensive market research, and full-scale operational execution, attaining profitability within the first quarter.
- Rolled out an integrated online store and last-mile delivery system by optimizing logistics with Python and managing backend data operations with SQL, laying the groundwork for a scalable, data-driven growth strategy.
- Formulated and executed targeted strategies based on statistical analysis and KPI dashboards, achieving sustained monthly revenue growth of 13% and stronger market positioning.

Education

2019-2023 National University of Colombia

Manizales, Caldas

Computer systems administration

- Studies postponed for family and financial reasons.

Certifications

2025 Google

Coursera

[Google Professional Data Analytics Certificate](#)

2025 Duke University

Coursera

[MLOps | Machine Learning Operations](#)

2025 Stanford University

Coursera

[Machine Learning](#)

2025 University of Michigan

Coursera

[Applied Data Science with Python](#)

2025 Johns Hopkins University

Coursera

[Data Science: Fundamentals Using R](#)

2025 University of Alberta

Coursera

[Software Design and Architecture](#)

2025 Imperial College London

Coursera

[Specialization in Mathematics for Machine Learning](#)

2025 University of Michigan

Coursera

[PostgreSQL for Everybody](#)

2024 IBM

Coursera

[IBM Professional Data Science Certificate](#)

Projects

CreditRisk X – Strategic Analytics & Predictive Modeling for Fraud Detection 2025 – Present
Data Science Project | Credit Risk & Financial Fraud

Devised a supervised learning pipeline for detecting credit card fraud in imbalanced datasets by integrating class balancing, dimensionality reduction, and probability calibration techniques, which upgraded detection precision by 18% and reduced false positives by 22%.

[\[GitHub\]](#)

HermesDB – Financial Data Extraction and Analysis System 2025 – Present

Data Engineering & Analytics | ETL Pipelines, APIs, PostgreSQL

Developed a scalable architecture for automated financial data extraction, transformation, and analysis by integrating ETL pipelines from MetaTrader and web scraping methods into a PostgreSQL system, while implementing optimized partitioning, indexing, and API services for real-time access—boosting data processing speeds by 45% and query performance by 30%.

[\[GitHub\]](#)

Customer Segmentation in Shopping Malls: Analysis and Marketing Strategies 2025

Data Science | Unsupervised Learning, Cluster Validation, Consumer Analytics

Applied advanced clustering techniques to segment customers using demographic and behavioral data, validated model robustness with multiple indices, and identified five distinct customer profiles that informed targeted marketing strategies, resulting in a 20% acceleration of campaign conversion rates.

[\[GitHub\]](#) | [\[Documentation\]](#)

Skills

Programming Languages: Python, C++, C, SQL, R, JavaScript, HTML, CSS, LaTeX.

Analysis Tools: Excel, Tableau, Scikit-learn, TensorFlow, Pandas, Matplotlib.

Databases and Big Data: MongoDB, PostgreSQL, Oracle, Spark, Hadoop.

Cloud Computing: AWS, Google Cloud, Azure.

Soft Skills: Leadership, Project Management, Effective Communication.

Honors & awards

2018 Secretary of Education

Best Saber 11 Tests

Valledupar, Cesar