

MANUEL EMILIO ARIAS DIONICIO

Data Analyst · Data Scientist · Python Developer

Python · SQL · R · Databricks · Power BI · Machine Learning · ETL

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SUMMARY

Early-career data professional with hands-on experience in analytics, Python automation, ETL development, and KPI design within a GMP-regulated industrial environment at Fresenius Kabi, a Fortune 500 medical company. Reduced manual reporting effort by 60% through Python-based process automation. Develops ETL workflows, BI dashboards, and machine learning models across personal and academic projects using Python, SQL, Databricks, and Power BI. Pursuing B.S. in Computer Science Engineering.

PROFESSIONAL EXPERIENCE

Fresenius Kabi Medical | *Data & Automation Technician*

Haina, DR · May 2025– Present

- Implemented Python-based automation for data processing and validation across industrial reporting workflows, reducing report generation time by ~60% and eliminating significant manual effort for the operations team.
 - Designed and developed KPIs to monitor critical production process parameters, enabling engineering and maintenance teams to track operational performance through structured, data-driven metrics.
 - Developed automated data cleaning, transformation and monitoring workflows to ensure quality and integrity of operational data sourced from automated industrial systems in a GMP-regulated environment.
 - Analyzed operational datasets to identify patterns and inefficiencies in productivity, quality, and throughput, provided actionable insights and recommendations to engineering and operations teams, supporting continuous process improvement initiatives.
 - Collaborated with engineering, maintenance, and operations stakeholders to translate business needs into data solutions, bridging the gap between industrial systems and analytical reporting.
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SELECTED PROJECTS

Inventory Analytics Pipeline · *Databricks · Python · SQL*

- Developed an ETL pipeline on Databricks using Python and SQL to clean, transform, and model inventory data for business analysis.
- Structured the data model to support analytical queries, applying data quality checks and transformations to produce a clean, query-ready dataset for downstream analysis.

E-Commerce Analytics Pipeline · *Python · SQL · SQLite · Pandas*

- Built an end-to-end ETL pipeline to process transactional e-commerce data from raw ingestion through transformation and loading into a SQLite relational database schema.
- Implemented data validation routines and applied exploratory data analysis to surface customer behavior patterns and revenue trends across product and time dimensions.

Sales Analytics Dashboard · *Power BI · DAX · SQL*

- Designed an interactive Power BI dashboard to visualize sales performance across key business dimensions including region, product, and time period, using DAX measures for calculated KPIs.
- Connected the dashboard to a structured SQL data source, enabling dynamic filtering and drill-through analysis to support data-driven decisions for a simulated business use case.

Predictive Analytics Models · *Python · Scikit-Learn · R*

- Developed and evaluated classification and regression models using Scikit-Learn to predict business metrics, applying feature engineering, train/test splitting, and cross-validation best practices.
 - Reproduced statistical analyses in R using ggplot2 for visualization, strengthening proficiency across both the Python and R data science ecosystems.
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TECHNICAL SKILLS

Programming Languages: Python · SQL · R

Data Engineering: ETL · Databricks · SQLite · Data Pipelines · Data Modeling · Data Quality · Process Automation

Data Analytics & Machine Learning: Pandas · NumPy · Scikit-Learn · TensorFlow · EDA · Statistical Analysis · Feature Engineering · Predictive Modeling

BI & Visualization: Power BI · DAX · KPI Development · Matplotlib · Seaborn · ggplot2

Cloud & AI: Microsoft Azure · Azure AI · OpenAI API · Google Gemini API
Tools: Git · GitHub · Jupyter · VS Code · PyCharm · Google Colab · Excel

E D U C A T I O N

Pontificia Universidad Católica Madre y Maestra (PUCMM) <i>B.S. Computer Science Engineering — In Progress</i>	Santo Domingo, DR · January 2026– Present
Universidad CENFOTEC <i>Technical Degree in Data Analytics</i>	San José, CR · Feb 2025 – June 2026
CENTU <i>.NET Programming Technician · Computer Technician</i>	Santo Domingo, DR · May 2024 – Feb 2025

C E R T I F I C A T I O N S

Python for Data Analysis · Exploratory Data Analysis (EDA) · Data Mining · Business Analytics I · Introduction to R & Data Analytics · Machine Learning I

L A N G U A G E S

Spanish — Native **English** — C1 Professional Working Proficiency