# ERICK SANG

Data Engineer

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Location: Madrid, Colombia

### PROFESSIONAL SUMMARY

Data Engineer with 5+ years of experience designing, developing, and maintaining scalable data pipelines, data warehouses, and data lakes. Expert in Python, SQL, SAS, ETL/ELT, and Big Data technologies including Hadoop, Spark, and Kafka. Proven ability to collaborate with cross-functional teams and DevOps to deliver high-impact data solutions. Specialized in on-premises to cloud data migration (AWS, Azure, GCP), process automation, optimization of relational and NoSQL databases, and data visualization with Power BI, SAS VIYA, LookerML, and BigQuery.

### WORK EXPERIENCE

### SohoHumantech

Bogotá, Colombia

Data Engineer

June 2025 - July 2025

- Developed and implemented data pipelines for human resources information processing
- Designed data warehouse architecture to centralize employee data and HR metrics
- Implemented ETL/ELT solutions using Python and SQL to automate data processes
- Created interactive dashboards with LookerML and BigQuery for talent management KPIs visualization
- Developed frontend with React and Tailwind CSS for API integration and dashboard component generation
- Optimized BigQuery queries achieving 40% improvement in response times
- Collaborated with HR teams to define data requirements and business metrics
- Implemented data quality validations and automated process monitoring

# Corporación Unificada Nacional (CUN)

Bogotá, Colombia

Data Engineer

April 2025 - June 2025

- Designed and implemented Single Source of Truth (SSOT) architecture in AWS for the university
- Developed data pipelines using Python full-stack with AWS Glue, Lambda, and S3 for academic data consolidation
- Implemented data lake in AWS S3 with optimized partitioning for efficient queries
- Utilized Amazon Redshift for data warehouse with query and index optimization
- Implemented Apache Airflow in AWS for data workflow orchestration
- Developed REST APIs with AWS API Gateway and Lambda for consolidated data access
- Implemented monitoring and alerting with CloudWatch for data pipelines
- Achieved 60% reduction in consolidated data access time

# **FACTECH**

Bogotá, Colombia

Data Engineer

September 2024 - March 2025

- Designed and implemented efficient data pipelines using Apache Airflow, achieving 90% improvement in processing
- $\bullet$  Developed ETL/ELT solutions for large data volumes and real-time flows with Python and SQL

- Migrated legacy systems to modern cloud architectures in AWS/Azure, ensuring integrity and optimization
- Implemented automated data quality validations reducing errors by 35% and guaranteeing data quality
- Optimized relational databases (SQL Server, PostgreSQL, Oracle) and NoSQL (MongoDB, Cassandra), reducing query times by 50%
- Built infrastructures for Machine Learning solution integration and analytical processing
- Collaborated with DevOps teams in implementing Infrastructure as Code (IaC) solutions and CI/CD processes
- Implemented data modeling and data warehousing using Snowflake and Redshift

### Teleperformance

Bogotá, Colombia

Data Specialist

December 2021 - March 2025

- Designed and developed data pipelines for ingesting data from various sources (REST APIs, web scraping, RPA, log files)
- Transformed and cleaned raw data using Python and SQL, ensuring data quality and consistency
- Maintained monitoring and uptime of all production databases and processes (SQL jobs, .NET framework executables)
- Diagnosed and fixed database and process errors using debugging tools
- Optimized system performance and functionality, recommending optimizations to existing queries
- Built data models for data warehousing and analysis using data modeling techniques
- Implemented data visualization and reporting using Power BI and Excel VBA

### **EDUCATION**

### Polítécnico Grancolombiano, Bogotá | Software Engineering

2023 - Present

- Status: Eighth semester approved
- Relevant Courses: Software Architecture, Database Systems, Cloud Computing, Machine Learning

### ECCI, Bogotá | Automation and Robotics Technology

2017 - 2021

- Status: Degree option
- Relevant Courses: Control Systems, Industrial Automation, Robotics Programming

# Universidad Distrital Francisco José de Caldas, Bogotá | Electronic Engineering 2012 - 2016

- Status: Deferred-retired
- Relevant Courses: Digital Systems, Microprocessors, Signal Processing

### **KEY PROJECTS**

# Single Source of Truth (SSOT) in AWS | Corporación Unificada Nacional (CUN) 2025

- Design and implementation of SSOT architecture in AWS for academic data consolidation
- Development of data lake in S3 with optimized partitioning
- Implementation of data warehouse in Redshift with query optimization
- Development of REST APIs for consolidated data access
- Full Python stack with AWS Glue, Lambda, S3, Redshift
- 60% reduction in consolidated data access time

# HR System with Data Warehouse | SohoHumantech

- Development of data warehouse for employee data centralization
- Implementation of ETL/ELT pipelines for process automation
- Creation of interactive dashboards with LookerML and BigQuery
- Frontend development with React and Tailwind CSS
- BigQuery query optimization with 40% improvement in response times

### On-Premises to Cloud Data Migration | FACTECH

2024

- Successfully migrated legacy systems to modern cloud architectures in AWS/Azure
- Implemented data lakes and data warehouses using Snowflake and Redshift
- Performance optimization with 50% reduction in query times
- Implementation of data governance and compliance frameworks

### TECHNICAL SKILLS

**Data Engineering** ETL/ELT, Apache Airflow, Data Pipeline Development, Data Warehouse Design, Data Lake Implementation

Big Data Hadoop, Apache Spark, Apache Kafka, Data Processing, Real-time Data Flows

Cloud Platforms AWS (Glue, Lambda, S3, Redshift, CloudWatch), Azure, GCP, Snowflake

Databases SQL Server, PostgreSQL, Oracle, MongoDB, Cassandra, BigQuery

Programming Python, SQL, Java, JavaScript, R, Excel VBA

**Data Visualization** Power BI, SAS VIYA, Looker, LookerML, Tableau, Dashboard Development

Frontend Development React, Tailwind CSS, API Integration, Dashboard Components DevOps CI/CD, Jenkins, Git, GitHub, Infrastructure as Code (Terraform, CloudFormation) Data Quality Data Validation, Data Cleansing, Data Governance, Automated Monitoring

### **CERTIFICATIONS**

| Python Essential, LinkedIn Learning                    | 2024 |
|--|------|
| Python Certify, ProgrammingHub                         | 2024 |
| SQL Basics, SoloLearn                                  | 2024 |
| SQL Intermediate, SoloLearn                            | 2024 |
| SQL Advanced, SoloLearn                                | 2024 |
| Power BI, LinkedIn Learning                            | 2024 |
| Associate Data Engineer in SQL, DataCamp (In Progress) | 2024 |
| Data Engineer in Python, DataCamp (In Progress)        | 2024 |

#### LANGUAGES

Spanish Native

**English** Intermediate (B2) - TOEFL/IELTS certification in progress

2025

# ACHIEVEMENTS & METRICS

- Business Impact 90% improvement in data processing speed, 60% reduction in consolidated data access time, 40% optimization in HR queries, 35% reduction in data errors, 50% optimization in database query times
- **Technologies Implemented** 6+ cloud technologies (AWS, Azure, GCP, Snowflake, Redshift, S3), 3+ programming languages (Python, SQL, Java), 4+ databases (SQL Server, PostgreSQL, MongoDB, Cassandra), 2+ visualization tools (Power BI, SAS VIYA)
- **Availability** 24/7 availability of critical systems, 100% compliance with regulatory requirements