Eduardo Castellanos Rodríguez

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Profile

Data Engineer with over 11 years leading data engineering initiatives within the financial industry. Specialized in high-volume, mission-critical environments, and the design and optimization of scalable data pipelines (both batch and near real-time). Expert proficiency in SAS (Base, Macro, DI Studio), Python, PySpark, T-SQL, and SSIS, as well as Data Warehouse, Data Lake, and Lakehouse architectures.

Solid experience with cloud platforms (AWS, Azure), implementing solutions with Azure Databricks, AWS Glue, Amazon S3, and Snowflake for large-scale data processing. An expert in Snowflake for cloud data warehousing, with an emphasis on migrations, auto-scaling, and optimized SQL queries, which has led to significant reductions in operational costs and processing times in multi-cloud environments. Proficient with NoSQL databases (MongoDB), integrating hybrid environments for semi-structured and high-velocity data.

Extensive capabilities in data modeling (relational and NoSQL), Data Mart design, data governance, quality, and traceability. Skilled in the automation of strategic and regulatory reports, ensuring full regulatory compliance. A key collaborator in agile and multidisciplinary teams, focused on operational efficiency, technological innovation, and the optimization of the entire data lifecycle.

Education

08/2011 – 09/2014 CDMX, MÉXICO
Computer Systems Engineer
YMCA University

08/2021 – PRESENT CDMX, MÉXICO
Specialization in Information Technology
YMCA University

Work Experience

2024 – 2025 CDMX, MÉXICO
Data Engineering Consultant
Banco Popular Dominicana, S.A
Led the implementation of automated ETL processes, consolidating and standardizing strategic data from multiple sources into a Data Lake, which generated a 15% increase in operational and commercial effectiveness.

Optimized data pipelines through enhancements in transformations, validations, and conditional logic, utilizing a Microservices architecture to develop modular and scalable financial applications, achieving a significant 25% reduction in processing times.

Implemented and migrated data warehousing workloads to Snowflake, leveraging its auto-scaling and separate storage/compute capabilities. This enabled real-time query processing and a 30% reduction in operational costs, facilitating advanced data analytics in multi-cloud environments.

Applied Technologies: SAS DI Studio and SAS macros for the design and development of data pipelines.
Python with PySpark for large-scale data processing.
NoSQL databases such as MongoDB for storing and managing unstructured data.
Cloud platforms like AWS and Azure Databricks for scalability and flexibility in data processing.
Snowflake for cloud data warehousing, with a focus on ETL, optimized SQL queries, and integration with BI tools.

Work Experience

2022 – 2023 CDMX, MÉXICO
Data Engineering Consultant
BBVA México S.A.
Developed data pipelines by implementing a Data Warehouse architecture, resulting in a 30% increase in information accuracy for strategic decision-making.

Implemented automated reporting pipelines in multinational environments using a Data Lake architecture, which reduced manual work by 60% and accelerated access to key information.

Contributed to training analysts in the development and maintenance of data pipelines, promoting best practices and strengthening the team's capabilities.

Technologies Used: SAS DI Studio, SAS Macros , Python, PySpark , MongoDB, AWS, Azure Databricks.

Work Experience

2019 – 2022 CDMX, MÉXICO

Incident Analyst / Data Engineer
Edenred México S.A. De C.V.

Started as an Incident Analyst, efficiently managing and resolving critical operational tickets in under 48 hours to maintain business continuity.

Participated in the design, development, and optimization of data pipelines in SSIS, improving ETL process efficiency and data availability for critical operations.

Collaborated on refactoring .NET integration components for Service-Oriented Architectures (SOA), resolving concurrency and synchronization issues to achieve greater stability and performance.

Applied Technologies: SSIS , SQL Server , T-SQL , .NET, C# , Data Warehouse architecture, SOA , TFS/Git.

2013 – 2019

Data Analyst
Grupo Financiero Banamex

Designed and implemented automated solutions in .NET Framework under an SOA architecture, optimizing workflows in the Disputes Department and reducing management times by 40%.

Administered and optimized SQL Server databases, improving query performance and data update efficiency by 30% through index tuning and optimized stored procedures.

Refactored the business logic of critical applications, resolving concurrency and race condition issues in multi-threaded scenarios to increase system stability and availability.

Applied Technologies: .NET, C#, Visual Studio , SQL Server, T-SQL , Windows Services , SOA , TFS.

Knowledge

SKILLS

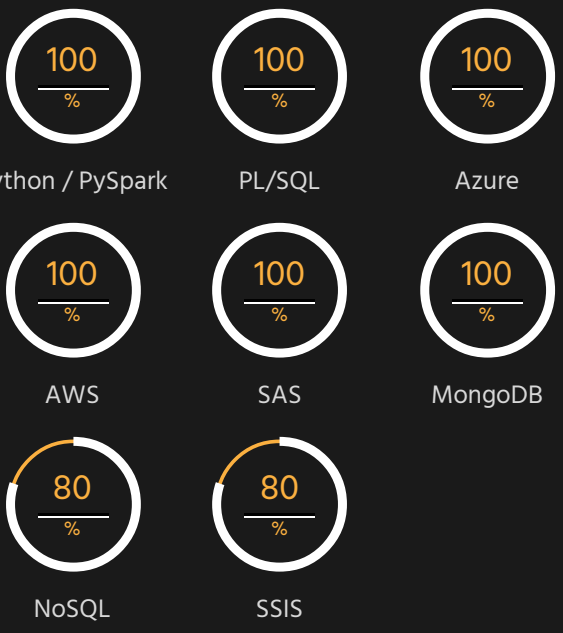
Data governance	**Profesional**
Data quality	**Profesional**
Traceability	**Profesional**
Report automation	**Profesional**
SQL query optimization	**Profesional**
Index tuning	**Profesional**
Query tuning	**Profesional**
Concurrence	**Profesional**
Transactional logic	**Profesional**
Assertive and effective communication	**Profesional**
Collaborative leadership	**Profesional**

Knowledge

SKILLS

Time management and task prioritization	**Profesional**
	Profesional

Technical knowledge



Achievements

Business Intelligence Area Creation

Spearheaded the creation of the BI area from scratch, developing 25+ strategic KPIs using SAS and Python which drove a 15% reduction in credit losses and a 10% improvement in resource allocation.

Regulatory Reporting Automation

Engineered the end-to-end automation of the RR038 regulatory report using SAS DI Studio and Azure Data Factory (ADF), resulting in 100% reporting accuracy and saving 80 man-hours monthly.

Internal Process Automation

Cut operational times by 40% in the Disputes Department by automating key processes with .NET Core, SQL Server, and Python scripts on Azure, enabling the team to handle a 25% higher case volume.

Data Pipeline Implementation

Architected robust data pipelines in a hybrid AWS cloud environment, processing over 5 TB of data daily with SSIS, SAS, and PySpark on EMR. This increased

Achievements

processing efficiency by 30% and cut infrastructure costs by 20%.

Regional Report Automation

Deployed an automated self-service reporting system using Python, Azure Synapse, and Power BI, slashing commercial response times by 60% and contributing to a 5% regional sales increase.

Database Performance Optimization

Optimized high-concurrency (>10,000 TPS) SQL Server and Oracle databases and integrated a MongoDB solution, cutting critical query response times by 70% (from 2s to ~600ms) and doubling system load capacity.