

CÉSAR ALEXANDER DELGADILLO SÁNCHEZ

Software & Data Engineer

Monterrey, México | cesar.alexanderds@gmail.com | LinkedIn | GitHub | Portfolio

SUMMARY

Computer Science student with professional experience in Data Engineering and Cloud Architecture. Proven track record of optimizing data pipelines and metadata governance at **Grupo DEACERO**. Proficient in building scalable applications using **Google Cloud Platform**, **Python**, and **SQL**. Passionate about automating data workflows and developing systems.

EXPERIENCE

Grupo DEACERO

Data Engineer Intern

Monterrey, México

March 2025 – Present

- Led the migration of **ETL workflows** from **SQL Server** to **Google BigQuery**, refactoring legacy T-SQL and Excel logic to optimize compute resources and engineering a **Python-based** automated QA framework to validate data consistency, ensuring 100% integrity across large-scale inventory datasets.
- Designed and implemented a **Salesforce-to-BigQuery** replication architecture using **Google Datastream**, including automated dataset validation and dynamic object streaming via **GCP REST APIs**.
- Refactored a multi-source replication module (**SQL Server**, **Salesforce**), improving code maintainability and strengthening error handling.
- Operated and monitored existing SQL Server replication pipelines for **SQL-to-SQL** and **SQL-to-BigQuery**, ensuring reliable **CDC-based** sync and data consistency across environments.

TECHNICAL SKILLS

- **Programming Languages:** C, C#, Python, SQL, TypeScript, JavaScript, HTML/CSS.
- **Cloud & Data:** Google Cloud Platform, ETL Pipelines, Data Governance, Airbyte.
- **AI & Automation:** AI-Pair Programming, Prompt Engineering, LLM Integration.
- **Backend & APIs:** RESTful Architecture, JWT Authentication, Microservices, Supabase implementation.
- **Frameworks & Libraries:** .NET Core, Angular, Ionic, TailwindCSS, Astro, React.
- **Tools:** Git/GitHub, Postman, Firebase, SQL Server.
- **Languages:** Spanish (Native), English (C1 - Professional Proficiency).

PROJECTS

Secure Distributed Banking Ledger | C# .NET, MySQL

- Architected a secure RESTful API for financial transaction processing, implementing **JWT Authentication** to safeguard user data and prevent unauthorized access.

Real-Time Social Content Platform | Angular, Ionic, Firebase, TypeScript

- Developed a high-performance mobile-first application using **Angular** and **Ionic**, replicating complex social graph interactions and feed algorithms.
- Integrated **Firebase** as a Backend-as-a-Service (BaaS) to enable real-time data synchronization across web and mobile clients with sub-second latency.
- Implemented fully functional user authentication and content management features using TypeScript.

PSell Kitchen Dashboard | Supabase Realtime, PowerSync

- Designed a real-time, bidirectional sync architecture using **Supabase Realtime** and **PowerSync**, keeping order state consistent across web and mobile clients.
- Built a Kanban-style kitchen operations dashboard with automated visual/audio alerts and time-based status tracking to improve throughput and reduce response times.

Enterprise Event Management System | C# .NET, SQL Server, Azure

- Led backend development for a team, designing normalized **SQL Server** database schemas to manage complex event data.
- Built and deployed CRUD API endpoints on **Azure**, facilitating seamless event creation and management for end-users.

EDUCATION

Universidad Autónoma de Nuevo León (UANL) - FCFM

Bachelor of Science in Computer Science

Monterrey, México

Exp. Grad. June 2026

- **Certifications:** Advanced Web Development Applications (**US-IT**), Basic Data Science (**Google**).
- **Activities:** Participant at Gran PremioMX (Algorithm & Problem Solving Competition).