Thank you for the opportunity to introduce myself. I’m Santosh Kumar Gouda, with over 8 years of experience in **data engineering**, specializing in building **scalable data pipelines** that process millions of records and generate **actionable insights** across various industries including **Retail, Fintech, Aerospace, and Mining**.

In my current role as a **Data Analytics Technical Lead** at **Sears Holdings India**, I’ve been leading the **data migration** and **automation** efforts for our client **Transformco**. One of the most recent projects I worked on involved **migrating data** from **on-premise MySQL OLTP systems** to **Snowflake** for unified analytics, and I also facilitated data transfer between **Google BigQuery** and **Snowflake**.

A key challenge we faced during the project was ensuring seamless **data migration** while minimizing downtime. The volume and complexity of the data, which spanned multiple systems, led to issues with **data integrity** during the migration. To address this, I implemented **custom Airflow DAGs** to automate and monitor the process, which significantly improved efficiency and ensured data consistency across platforms. Additionally, I optimized **SQL queries** and used **BigQuery** for **ad-hoc analysis**, delivering timely insights to stakeholders.

Through this project, we achieved a **30% increase** in data retrieval efficiency and streamlined the **reporting process** using **Tableau**, providing the business with a comprehensive view of **sales** and **profit metrics**.

The ability to solve complex data issues, collaborate with cross-functional teams, and deliver **high-performance solutions** has been central to my success in this role.

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Thank you for this opportunity. I am Santosh Kumar Gouda, a Data Analytics Technical Lead with 8+ years of experience in data engineering. Currently, I'm working at Sears Holdings India for Transformco project.

Let me tell you about my current project at Transformco. The main objective was to migrate data from on-premises OLTP systems (MySQL) to Snowflake data warehouse and integrate with Google BigQuery. I'm leading a team of 8 members.

The two major challenges we faced were:

1. Data Consistency Challenge:

* We had to ensure zero data loss during migration while maintaining daily business operations
* Solution: Implemented parallel processing using Airflow DAGs to run both old and new systems simultaneously
* Result: Achieved 100% data accuracy with automated reconciliation processes

1. Performance Optimization Challenge:

* Complex queries were running slow due to large data volumes
* Solution:
  + Implemented proper data partitioning in Snowflake
  + Optimized BigQuery queries with appropriate clustering
  + Created materialized views for frequently accessed data
* Result: Improved query performance by 40% and reduced daily processing time

For automation, we used Apache Airflow to orchestrate our ETL processes, which helped us:

* Automate daily sales and profit reports for Home Appliances
* Implement data quality checks
* Handle failure scenarios with automated retries
* Set up alerts for any pipeline issues

The project was successful as we:

* Completed migration with zero data loss
* Improved query performance by 40%
* Automated reporting processes
* Provided timely insights to stakeholders through Tableau dashboards