Usha Madhavi Gorli

Snowflake Data Architect

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Professional Summary:

• Snowflake Data Architect with 12+ years of strong IT experience in data analysis, cloud-based data warehouse and applications using open-source technologies, Business Intelligence with a good understanding of Big Data Technologies

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- Experience in Banking, Pharma, Healthcare, Retail and Automobile domains.
- Successful in development roles that demand rigor, a high drive and dedication, and a focus on delivering solutions using tools and techniques best suited for the project.
- Have extensive experience in migrating on premise ETLs to Google Cloud Platform(GCP) using cloud native tools such as Big Query, Cloud Data Proc, Google Cloud Storage
- Experience using IBM Data Stage (V 11.5/9.1/8.5) designing and developing parallel jobs using Data Stage Designer, Data Stage Director and Data Stage Administrator.
- Expertise in Data Modeling for datawarehouse/data mart development and data analysis
- Setup Resource Monitors, Role-Based Access Control (RBAC), and scalable Virtual Warehouses for efficient resource management
- Experience in designing and implementing datawarehouse applications using ETL tool Talend Data Fabric for data integration and data ingestion.
- Skilled in ETL process, leveraging tools like Informatica to efficiently extract, transform and load data
- Proficient in SQL and Snowflake for data warehousing and querying.
- Worked on dimensional data modeling in star and snowflake schemas and slowly changing dimensions(SCD)
- Designed and implemented a modular, scalable, and efficient data transformation workflow using DBT for a cloud-based data warehouse
- Understanding CI/CD pipelines to automate Snowflake deployments
- Experienced in developing interactive dashboards and visualizations using Cognos to communicate complex data insights effectively
- Proficiency in Python for modern ingestion and experience in the usage of libraries for data engineering like pandas, SQL alchemy, snowpark, etc.
- Proficient in Big Data technologies like HDFS, YARN, MapReduce, PIG, HIVE and Spark
- Responsible for Requirements Analysis, Solution Design, Development, Delivery and production
- Responsible for maintaining the design documents and Technical Design documents.
- Experience with KANBAN, JIRA, AGILE SCRUM, and Waterfall and involved in all phases of SDLC.
- Building Solution Design Document (SDD) and Business Require Document (BRD).

- Developed Informatica Development standards, best practices, solution accelerators, and reusable components for design and delivery assurance.
- Excellent analytical and programming abilities in using technology to create flexible and maintainable solutions for complex development problems.
- Extensive experience in developing SOAP and REST-based Web Services design and development.
- Good experience in Development, Support, Administration, and Deployment activities across QA, UAT, and Production environments
- Pro-active to production issues, punctuality in meeting deadlines, and always following first-time right and on-time delivery approach.

Technical Skills:

Programming Languages	Java, Python
Big Data	Hadoop, Spark, Hive
Web Technologies	HTML, XML
Data Management	SQL, Oracle, MySQL, PL/SQL, MongoDB, Netteza, teradata, Postgres, SnowSQL, Erwin
Cloud Platforms	Snowflake, AWS (EC2, S3, Lambda), GCP (App Engine, Big Query, Data Store, DataFlow Pipelines), Azure Data Factory, Salesforce
ETL Tools	Informatica power center 9.x,10.x, Informatica Intelligent Cloud Services, Data Stage, Matillion, Talend, DBT, Data Visualization Object(DVO)
BI Tools	Epic clarity,Cogito, DOMO, OBIEE, Tableau, QLIK View, BO
Operating system	Unix
Methodologies	Agile Scrum and Waterfall
Data Exploration	MS power BI, Streaming Analytics, S3, Redshift, Databricks

Professional Experience:

Client: Truist | Nov 2023 - Mar 2025

Role: Snowflake Data Architect

Description : Truist is a purpose-driven financial services company serving clients in a number of high-growth markets in the country, offering a wide range of financial services

Skills: Spark SQL API, Google Maps API, Python, ADP, GCP

- Developed and deployed NLP models using Python libraries like spaCy and Hugging Face, enhancing search functionalities and driving business insights for unstructured text data.
- Built data pipelines in airflow in GCP for ETL jobs using different airflow operators
- Built efficient indexing structures using Elasticsearch to improve search accuracy and speed, processing diverse document types including text, images, and tables.
- Led end-to-end deployment of recommendation models and LLMs, improving operational efficiency and decisionmaking processes.
- Extensive experience with Azure Data Factory for creating and managing ETL workflows, integrating multiple data sources into Azure-based data lakes and warehouses
- Process and transform XML, Parquet data using PySpark's DataFrame API

- Created a monthly ADP incremental analysis report tracking metrics like customer penetration, subscription cancellations, and the probability of being active in ADP for both store and Web channels.
- Use customer data with epic cogito data to build dashboard reports and drill down reports for analyst and management to identify existing epic registered over time
- Used the Data Stage Director for scheduling, validating, running and monitoring the jobs
- Automated the integration of data pipelines using AWS Lambda and Databricks, ensuring real-time data availability for model training and decision-making purposes.
- Managed and optimized the development of digital products using agile methodologies to create scalable solutions for predictive analytics.
- Overhauled and automated the end-to-end payroll process, from schedule generation to organizing until emailing them to store, district and regional managers, saving hundreds of man-hours.

Client: CVS Health | May 2021 - Sep 2023

Role: Snowflake Data Architect

Description: America's leading health solutions company, CVS Health provides advanced healthcare from pharmacy services and health plans to health and wellness.

Skills: Spark, AWS, Talend, Airflow, Docker, Snowflake, PL/SQL, GCP

Responsibilities:

- Implemented Apache Airflow for scheduling and monitoring data pipelines
- Experience in GCP dataproc, data flow, GCS, cloud functions, BigQuery, IAM, DataStudio for reporting
- Designed ETL jobs to load data from different databases, flat files, csv files to Target and experience with high volume databases
- Good experience using Epic Cogito datawarehouse. Load data from clarity to netezza database
- Implemented Talend POC to extract data from Salesforce API as an XML object & .csv files and load data into SQL Server Database.
- Performed data extraction, transformation, loading and integration in datawarehouse, data stores and master data management
- Automate data ingestion workflows from sources like AWS S3 into Snowflake using SnowSQL
- Worked on architecting the ETL transformation layers and writing spark jobs to do the processing
- Developed simple and complex PL/SQL stored procedures in snowflake to check and validata data in multiple applications
- Aggregated daily sales team updates to send reports to executives and to organize jobs running on spark clusters
- Implemented a continous delivery pipeline with docker, Github and AWS
- Built performant scalable ETL processes to load, cleanse and validate data

Client: National Grid | Aug 2019 - Feb 2021

Role: Snowflake Architect

Description: National Grid is a multinational energy company headquartered in London, UK, with operations in the UK and the Northeastern United States. The company operates electricity and gas transmission networks, as well as electricity and gas distribution networks, in both countries.

Skills: Snowflake, PL/SQL, Python, Matillion, Unix, Airflow, GCP

Responsibilities:

- Created and managed Snowflake databases, roles, and warehouses to support enterprise data warehousing and analytics solutions.
- Did Dimensional Data Modeling Logical and Physical
- Used Apache Airflow in GCP composer environment to build data pipelines and used various airflow operators like bash operators, branching operators
- Implemented and enforced data governance policies to ensure data security, compliance, and regulatory adherence for all the entities.
- Monitored Snowflake performance, identifying and optimizing bottlenecks by tuning queries and leveraging Snowflake's clustering and materialized views
- Managed user access controls, roles, and permissions, ensuring security best practices were enforced for sensitive data handling.
- Involved in Data Stage Admin tasks setting project wide defaults, creating environmental variables and monitor project disk space, configuring DSN entries.
- Integrated Snowflake with AWS services like S3 and IAM roles, leveraging Snowpipe for continuous data loading.
- Developed and executed data migration strategies, ensuring data integrity and accuracy throughout the process using advanced Snowflake tools like SnowSQL and Bulk Data Load.
- Data Integration builds for files and JDBC/ODBC extraction using Matillion
- Lift and shift of 33 active data marts from 8370 tables into the Snowflake staging layer
- Migrated historical data from Oracle to Snowflake
- Automated Snowflake performance monitoring and backups using Python scripts.
- Implemented indexing strategies and data partitioning techniques to optimize Snowflake query performance and reduce bottlenecks
- Optimized the data load performance by identifying and tuning queries, partitioning the data by utilizing Snowflake features clustering and materialized views
- Collaborated with all stake holders to ensure that the data is migrated accurately and efficiently.
- Performed data backups, recoveries, and security audits to maintain database integrity and availability.
- Developed and implemented data migration strategies, ensuring data integrity throughout the process.
- Ensured that the data migration process complies with NG security requirements, such as data privacy laws and regulations, and that appropriate security measures are in place to protect sensitive data
- Performed and implemented disaster recovery strategies to ensure database integrity and availability.
- Automated database monitoring and administration tasks using both Python and Bash scripts, improving operational efficiency.
- Performed testing of the migrated data to ensure that it is accurate and complete. After testing, deployed the migrated data to production and validating it in Snowflake.
- Monitored for security threats, responded to incidents promptly, and implemented robust security measures to protect sensitive data.
- Tuned database configurations to improve query performance, implementing indexing strategies and partitioning techniques to reduce bottlenecks.
- Diagnosed and resolved database-related issues and errors, providing ongoing technical support to data analysts and engineers.
- Provided ongoing maintenance and support for the migrated data, including monitoring performance, troubleshooting issues, and implementing any required updates or changes
- Build CI/CD Pipeline for Snowflake Using DevOps with GitHub & Liquibase

Client: Ford Motor Company | Jan 2018 – Jun 2019

Role: Snowflake Platform Engineer

Description: Ford Motor Company is a largest global automotive industry leader based in Dearborn and one of the largest manufactures in the US and offer different products across locations.

Skills: AWS, Snowflake

Responsibilities:

- Managed end-to-end data architecture, from selecting the platform, designing the technical architecture, and developing the application to finally testing and implementing the proposed solution
- Coordinated the ingestion of various Enterprise, IIoT, and NextGen Manufacturing data sources across Ford, working with a diverse set of application IT groups
- Identified data sources, both internal and external, and worked out a plan for data management that is aligned with the organization's data strategy
- Designed and developed data extraction and integration code modules depending on business requirements
- Handled data modeling in snowflake
- Integrated Snowflake with AWS Lambda and Step functions
- Experience with data security and data access controls and design
- Worked involving bringing together multiple products and processes to identify interdependencies between systems and processes
- Experience in all phases of Data Warehouse development from requirement gathering to develop code, unit testing and documenting
- Experience in bulk loading and continuous ingestion of data using COPY and Snowpipe respectively
- Built data pipelines that ingest different variety of file formats like JSON, XML and other file formats
- Redesigned the Views, used Temporary and Transient tables to increase performance on different datasets
- Implemented Python framework to ingest the data into snowflake
- Implemented Data Sharing and Data cloning for Snowflake code
- Finding ways/ methods to mine value out of existing data
- Involved in fixing various issues related to data quality, data availability and data stability
- Created the reject handling in a generic way such as this script handles the rejects for all subject areas and sends mail
- Created a script for table count validations from source every day and this can be used as generic script for all the applications by giving one file as input with the details
- Restored the Dropped Objects using Undrop command based on DROPPED ON value
- Involved in unit testing and system integration testing and Load and Performance testing.

Client: Smith+Nephew | Nov 2016 - Dec 2017

Role: Senior Software Engineer

Description: It's a multinational medical equipment manufacturing company developing a new supply chain application APS (Advanced Planning & Schedule)

Skills: SQL, IICS, DBT, Airflow

- Lead the development team to ensure the technical deliverables are met
- Contributed to the development and architecture of the supply chain application i.e. APS (Advanced Planning & Schedule)
- Built and maintained DBT models for transforming raw data into analytics-ready datasets, leveraging advanced
 SQL

- Developed and automated data quality testing using built-in DBT tests (e.g. unique, not_null, accepted_values) and custom tests for business logic validation
- Implemented version control workflows using Git to ensure collaborative development, code review, and version tracking
- Integrated DBT workflows with Apache Airflow to automate pipeline execution and ensure timely delivery of transformed data
- Evaluated and implemented cutting-edge analytics tools and technologies to enhance data processing, analysis, and visualization capabilities
- Established data governance policies and procedures to ensure data integrity, consistency, and security
- Contributed to the analysis and development of data that is needed to implement the Kinaxis system
- Responsible for Requirements Analysis, Solution Design, Development, Delivery and production support
- Responsible for maintaining the design documents and Technical Design documents.
- Extracted data from multiple source systems and staged the data into snowflake tables and views with the help of IICS jobs, and data hub jobs using power center
- Developed hundreds of views in staging schema as per the business requirement and the mapping documents shared by the business.
- Integrated all views from all source systems by using DataMart procedures and loading to DataMart tables
- Performed DataMart health checks for data validation and error handling before transferring the files to Kinaxis daily
- Developed user views on top of DataMart tables for delivering data in the form of files to Kinaxis using IICS jobs
- Standardized data definitions and ensure consistent business logic across teams by enforcing data governance rules using DBT models
- Experience with JIRA, AGILE SCRUM, and Waterfall and involved in all phases of SDLC.

Client: AIG | Jul 2015 - Aug 2016

Role: Big Data Analyst

Description: To provide a wide range of property casualty insurance and other financial services

Skills: Big Data, Spark

- Upgrade the application components from 9.6 to 10.2
- Responsible for loading tera bytes of data in CSV file format into spark cluster, extracting the data, and storing it
 into external hive tables and to the HDFS for downstream consumption.
- Experience working in a fast-paced environment following Agile methodologies with frequent and timely releases and adapting new technologies as they evolve.
- Designed and implemented MySQL tables for making spark jobs to consume data.
- Developed injection framework for the data coming from rest services related to user data, configured mappings and validations.

- Developed AWS Lambda functions in Python to automate data ingestion, transformation and integration
- Written spark-submit scripts to load config dynamically and submit the jobs.
- Developed workflows to trigger airflow spark jobs depending on the upstream output.
- Triggered Lambda functions using S3 events to enable event driven workflows
- Technologies used for developing the products are Spark, Hadoop, Hive, and Airflow.
- Used Programming languages Java, Scala, Python

Client: Bank of America | Oct 2013 - May 2015

Role: Technology Analyst

Description: Informatica Upgradation for market businesses serving consumers with a full range of financial and risk management products and services. I am responsible for understanding the business requirements to build or enhance the application components.

Skills: Informatica, Autosys, Unix, Toad Data Point 4

- Optimized data structures for performance and scalability to ensure efficient data retrieval and analysis
- Designed, developed, and maintained ETL processes using Informatica and
- UNIX shell scripting to extract, transform, and load data from various sources into data warehouses
- Implemented complex data transformations, aggregations, and calculations to support business
- Implemented data cleansing, validation, and transformation routines to ensure data quality and consistency
- Created interactive dashboards, reports, and visualizations using Cognos to present data in an understandable format
- Written and optimized complex SQL queries to retrieve and manipulate data and enhanced query speed and efficiency
- Documented BI processes, data mappings, and technical specifications to support knowledge transfer and future enhancements
- Always stay updated with the latest technologies and best practices to drive continuous improvement
- Upgrade the application components from Informatica 9.6 to 10.2 version
- ETL COE will migrate the Informatica 9.6 PROD code to Informatica 10.2 DEV and create the relational connections.
- Updated the system variables from 9.6 to 10.2
- · Fetched workflow details for Active jobs in Autosys and identified connection details
- Created relational connections in the 10.2 DEV environment
- Updated each workflow and sequence generator values
- Tested to run the job from Informatica and Unix in the DEV environment through wrapper scripts
- Compared the load time between Informatica 9.6 and Informatica 10.2 in the DEV environment

- Validated the test data from DEV with PROD data and performed unit testing
- UAT Migration, UAT Testing, and Data Validation
- Excellent analytical and programming abilities in using technology to create flexible and maintainable solutions for complex development problems

Client: Wells Fargo | Jul 2012 - Sep 2013

Role: Technology Analyst

Description: Informatica upgrades from 7.5 to 9.1.2 and enhances the data for banking, insurance, trust, investments, mortgage banking, retail, brokerage, and consumer finance implying the specifications after upgradation.

Skills: Informatica, db2, Oracle, Unix, DVO

Responsibilities:

- Responsible for the upgradation of IBM Informatica 7.5 to Informatica 9.1.2 for the client's Campaign Management System.
- Developing as per the technical design document (TDD) to meet the defined requirements.
- Analyzed the design documents of the Autosys and Brokerage Data Warehouse Jobs.
- Created the wrapper scripts using shell scripting in UNIX for the jobs to be migrated from DB2 to Oracle.
- Created mappings for the jobs through Informatica power center designer and creating workflows and sessions through workflow manager
- Executed the workflows using created wrapper scripts in Unix.
- Checked the data migration, implementing debugging and performance tuning.
- Checked the data sync in DB2 and Oracle target tables using the Informatica DVO (Data Validation Option) tool
- Coordinated and lead various meetings like Kick-off Meeting, Project status meeting with customer and team, root cause analysis meeting for defects, lesson learnt meetings.
- Participate in Scrum and other Agile meetings to understand the upcoming Work Items in Sprint and plan for testing promptly.

Educational Qualification:

Bachelors in Computer Science, JNTU Kakinada 2012