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**Sanjana Bhardwaj**

**ETL PowerBI Developer**

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**Weymouth, MA, H1B**

**Executive summary:**

Certified Microsoft Power BI Analyst with Around 10 years of experience as an IT professional, showcasing a robust background in Microsoft technologies and specializing in Data Engineering and Business Intelligence. Acknowledged for adeptly executing ETL processes and generating reports using SQL Server versions 2005 through 2016, coupled with expertise in SSIS, SSRS, MS Power BI, and Tableau. Boasts extensive experience across diverse sectors, including the Financial, Healthcare industry, and Insurance, managing substantial datasets efficiently. Demonstrates a proven aptitude in database design, ETL workflows, reporting, and advanced SQL querying. Created Snowflake Schemas by normalizing the dimension tables as appropriate, and creating a Sub Dimension named Demographic as a subset to the Customer Dimension. Possesses strong time management skills, self- motivation, and organizational values, complemented by excellent oral and written communication proficiency. A rapid learner with the ability to adapt swiftly to new technologies and roles, requiring minimal training. Experience with Snowflake utilities such as SnowSQL, Snow Pipe, Python, Tasks, Streams, Time travel, Optimizer, Metadata Manager, data sharing, and stored procedures.

**Core Competencies**:

* **Data Governance:** Ensures data security and compliance with data privacy regulations throughout the ETL process, safeguarding sensitive information and optimized data warehouse and proper data utilization.
* **Data Extraction:** Proficient in collecting data from various information systems sources, including databases, files, APIs, and web services, ensuring the reliable acquisition of vital information.
* **Data Transformation:** Highly skilled in the cleansing, enrichment, and structuring of data to conform to target system schema s and business requirements. Executes data cleansing, validation, and data type conversions to enhance data quality.
* **Data Loading:** Expertise in the efficient loading of transformed data into target data warehouses, data marts, and other repositories, utilizing robust loading processes.
* **ETL Development**: Adept at designing, developing, and maintaining ETL processes using industry-standard tools and programming algorithms, ensuring the seamless flow of data infrastructure.
* **Data Mapping:** Proficient in creating comprehensive data mapping documents that precisely define how data should be transformed and loaded from source to target systems.
* **Data Quality Assurance:** Experienced in implementing data quality checks and validations, guaranteeing data accuracy and integrity throughout the ETL process.
* **Performance Optimization**: Skilled at identifying and resolving performance bottlenecks in ETL processes, significantly enhancing data loading efficiency and data management.
* **Error Handling:** Proficient in building effective error-handling mechanisms that capture, log, and address data processing errors and exceptions, ensuring data integrity.
* **Data Integration:** Collaborates seamlessly with data analysts, data scientists, and stakeholders to ensure data availability for reporting and data analytics, promoting data-driven decision-making.
* **Data Reporting:** Proficient in creating diverse reports, including parameterized, drill-down, KPI, and pivot reports, using a range of data analytics tools such as SSRS, Tableau, and Power BI.
* **Documentation:** Meticulously maintains comprehensive documentation for ETL processes, including design specifications, data dictionaries, and process flow diagrams, enabling seamless knowledge transfer and process continuity.
* **Monitoring and Support:** Continuously monitors ETL jobs and provides exceptional support for data-related issues and failures, minimizing disruptions in data workflows.

**Testing:** Conducts thorough unit testing and integration testing to validate the accuracy of ETL processes, delivering high-quality results.

* **Version Control:** Demonstrates proficiency in using version control systems to manage and track changes to ETL code, fostering collaboration and code integrity.
* **Troubleshooting:** Swiftly diagnoses and resolves issues with ETL processes, providing technical support when necessary, reducing downtimes.

**Technical Skills**

**Languages:** T-SQL, PL/SQL, Dynamic SQL, XML, Visual Basic, C#, Python, Java

 **Databases:** MS SQL Server (2005-2016), MS Access, Oracle (10g/11g)

 **DWH/BI Tools:** Power BI, SSIS, SSRS, SSAS, BIDS, Tableau, SAS, Talend

**Tools and Utilities:** SQL Server Management Studio, SQL Server Profiler, Visual Studio, Power Pivot, Excel Power Pivot, TFS, GitHub, SaaS, AWS Operating Systems: Windows, MS-DOS, LINUX

**Education:**

* University Of Massachusetts, Dartmouth -MA-Master’s in computer science

Core Subjects: Computer Science, Data Algorithms, Data Management, Financial Data

* Maharishi Dayanand University, India-Bachelor’s in computer science

Core Subjects: Computer Science, Data Algorithms, Data Management, Financial Data, Electronics, Economics

**Professional Experience**

**Inherent Technologies LLC, Chandler, AZ Jan 2024 – Present**

**Lead PowerBI Developer**

**Client: HMI**

**Responsibilities:**

* Collaborated closely with stakeholders and the IT director to gather comprehensive business specifications, ensuring alignment with reporting goals and technological feasibility.
* Prepare and clean data from various sources for analysis and integration using SQL and ETL workflows.
* Facilitated Talend workflow testing for data.
* Participated in tracking compliance, data quality and other indicators using Talend Data Governance.
* Communicate findings and insights through presentations, reports, and meetings.
* Develop Key Performance Indicators (KPIs) to measure and track market trends, enabling informed decision- making and strategic planning.
* Create interactive and visually appealing reports and dashboards using Power BI Desktop.
* Analyze large datasets to identify trends, patterns, and insights.
* Collaborate with cross-functional teams to understand data requirements and gather feedback.
* Monitor and optimize the performance of PowerBI reports and dashboards.
* Provide training and support to users on how to effectively use Power BI tools.
* Involved in Data Ingestion to one or more Azure Services - (Azure Data Lake, Azure Storage, Azure SQL, Azure DW) and processing the data in In Azure Databricks.
* Experience working with Snowflake Multi cluster and virtual warehouses in Snowflake.
* Experience in ETL/ELT processes and data warehousing solutions you have designed or worked on during your project.
* Loaded diverse types (Structured, JSON, XML, flat files etc.) Into the Snowflake, cloud data warehouse.
* Experience on Apache Beam with Java.
* Worked with data mining, data collection, data cleansing, dataset preparation, ETL, ability to query and store information for machine learning models in an RDBMS database and program/automate using SQL.
* Created, provisioned different Databricks clusters, notebooks, jobs and auto scaling.
* Creating pipelines, data flows and complex data transformations and manipulations using Azure Data Factory (ADF) and PySpark with Databricks.
* Performed end-to-end delivery of pySpark ETL pipelines on Azure-Databricks to perform the transformation of data orchestrated via Azure Data Factory (ADF) scheduled through Azure automation accounts and trigger them using Tidal Schedular.

**Environment:** Power BI/Power Apps, Microsoft SQL Server 2018, T-SQL, SQL Server, Talend, Management Studio 2014/2019, cdata, WINSCP, VB/C#.net, Microsoft TFS, Microsoft Azure

**Transworld Systems Inc, Norwell – MA Sep 2022 – Dec 2023**

**Sr. ETL/Informatica Developer**

**Clients: Healthcare clients, Government and Educational**.

**Responsibilities:**

* Partnered with Project Managers to understand business rules and initiate SDLC for project execution, fostering effective cross functional communication.
* Oversaw code migrations to new environments, ensuring data integrity and optimized ETL processes through advanced techniques, including version control and rigorous testing.
* Collaborate with stakeholders to ideate and define actionable KPIs.
* Facilitated in managing access to data resources by configuring role-based access control using Azure Active Directory.
* Utilized Azure Information Protection to label and classify documents and emails containing sensitive information.
* Leveraged SQL Server Integration Services (SSIS) for complex ETL package development, streamlining data transfer to warehouses and data marts, creating data governance.
* Used Power BI Gateways to keep the dashboards and reports up to date.
* Experience in developing several Details, Summary reports including line and pie charts, trend analysis reports, and sub-reports per business requirements.
* Responsible for creating and changing the visualizations in Power BI reports and Dashboards on client requests.
* Implemented an efficient system for IT support requests, improving data quality and response times.
* Employed advanced diagnostic techniques to proactively resolve SSIS package, SQL job, and report failures, maintaining uninterrupted financial data processes which resulted in failures to be reduced by 70%.
* Independently engineered and launched new data extraction, transformation, and loading processes in production, providing mentorship to peers on optimizing queries for efficiency.
* Provided support for existing processes running in production, implementing optimized solutions with limited guidance.
* Designed and implemented data lake architecture using Snowflake Data Lake, Snowflake data warehouse, and S3 for scalable and efficient storage and processing of structured and unstructured data.
* Install and configure Apache Airflow for S3 bucket and Snowflake data warehouse and created DAGs to run the airflow.
* Worked with data integration between source and snowflake by using snow pipe.
* Full life cycle of Data Lake, Data Warehouse with Big data technologies like Spark, Hadoop and designed and deployed scalable, highly available, and fault tolerant systems on Azure.
* Processed huge datasets by leveraging Spark Context, SparkSQL, and Spark Streaming.
* Improved the query performance by transitioning log storage from Cassandra to Azure SQL Datawarehouse.

**Environment:** Microsoft SQL Server 2012/2016/2018, T-SQL, Azure, SQL Server, SSIS, SSRS, SSAS, Management Studio 2014/2019, MS SQL server Profiler, WINSCP, VB/C#.net, TFS/Track-it, FACS, Microsoft Azure, EPIC (Clarity data models), SharePoint, cdata.

**EOS-CCA, Norwell – MA Jan 2019 – Sep 2022**

**SQLBI/ETL Developer**

**Clients: Healthcare clients (UMass hospital, Seton etc. with EPIC systems), Government, Educational**.

**Responsibilities:**

* Work with Project Manager and IT Director to understand business rules and to discuss the requirements of the clients and create SDLC to execute the plan.
* Capture details of IT – support requests via company-based web portal tool.
* Responsible for supporting the issues with SSIS packages, SQL job failures and reports failure.
* Participated in Data Governance review meetings to assess the effectiveness of existing policies and procedures.
* Facilitated in implementing data life cycle management policies using Azure Data Lake storage to automate data retention and deletion based on predefined rules.
* Developing BI dashboards for the summary of analysis using various high-level charts, parameters and filters using SQL Reporting Services (SSRS) for business and finance team to do YTD, MTD analytics and forecasting the profitable analysis.
* Establishing data connection with ODBC such as Flexible Automated Collection Systems with ETL tool for data integration and reporting.
* Upgrading and developing various BAT files to make connections for data flow from client to organization and from organization to client using WINSCP.
* Designing and mapping overview documents to identify relationship between source and destination and to document the business process logic in the SSIS packages.
* Cultivated data expertise and executed robust data controls to ensure privacy, security, compliance, and data quality within designated areas of ownership.
* Pioneered the design, development, and launch of innovative data models and visualizations in production,

 leveraging widely accepted development toolkits.

**Environment:** Microsoft SQL Server 2012/2016/2018, T-SQL, SSIS, SSRS, SSAS, Power Query, AWS, Management Studio 2014/2019, MS SQL server Profiler, WINSCP, VB/C#.net, TFS, FACS, ARTIVA, Microsoft Azure, EPIC (Clarity data models

 **Dextro Software Systems Inc., Princeton Junction -NJ July 2016 – Jan 2019**

 **Tableau/ETL Developer**

**Client: Commonwealth of Massachusetts (Department of Public Health),EOS-CCA**

**Responsibilities:**

* Collaborated seamlessly with engineers, product managers, and data scientists to discern complex data needs, translating key insights into visually meaningful representations.
* Written T-SQL queries, stored procedures, user defined functions to implement mapping fields and remaining fields.
* Designed different dashboards to reflect KPI’s using Tableau Desktop.
* Used SSIS to create ETL packages to validate, extract, transform and load data to data warehouse/data marts.
* Designed, used, and managed mapping overview documents to identify relationship between source and destination and to document the business process logic in the SSIS packages.
* Designed staging tables, temp tables to perform multiple joins, merge statements, views and aggregate functions.
* Created T-SQL stored procedures and mdx queries to improve the performance of aggregate queries dynamically.
* Developed SSIS packages for data migration using OLEDB connection and transformation like Lookup, Merge, Data Conversion, Copy Column, and Derived Column.
* Test and Debug ETL packages and configured the packages for migration, worked with QA teams to qualify and migrate packages from Dev to test to PROD environments.
* Created reports like Drill-down reports for Customer’s available policies and registered policies, Parameterized reports for various kind of policies like commercial, personal and life using SSRS.
* Created data cubes using SSAS for efficient use of data tables and to avoid dead lock scenarios while interacting with database.
* Involved in creating complicated packages with custom coding using object-oriented language c#.net in SSIS.
* Developed dashboards for the summary of analysis using various high-level charts, parameters and filters using Tableau and integrating with R for generating statistical analysis of business and better customer services.
* Responsible for supporting the issues with reports on the enterprise environments (development, UAT, test and production).

**Environment:** MS SQL Server 2012, T-SQL, SQL Server Integration Services, Management Studio 2012, SQL server Profiler, AWS, Erwin, C#.Net, Tableau9, JIRA.

**Aparajita Finvest Ltd., Delhi - IN Dec 2012 - June 2014**

**SQL Developer Responsibilities:**

* Worked closely with clients as part of a development team to evaluate requirements and developed DW solutions and web development.
* Worked with DBA to design/implement/maintain the Data Warehouse and Business Intelligence solutions.
* Analyzed data for data quality and improved data architecture.
* Performed error handling in scripts for user portal of the company’s website.
* parameterized and sub reports etc. with different types of formats using Excel.

**Environment:** MS SQL Server 2008R2, T-SQL, VB.net, Java.