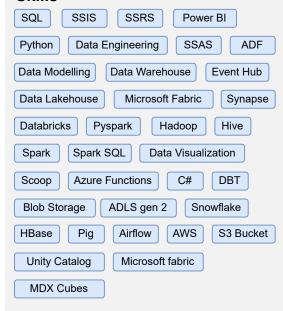# Nirav Rana

Sr. Data Engineer

✉ nirav000715@gmail.com

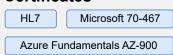☎ +91 9723183221 / 8200214827

📍 B/235 Sai Shraddha Township,
Nr. Siddharth Nagar,
Opp D-Mart, Khodiyar Nagar,
Vadodara - 390022

Skills

SQL	SSIS	SSRS	Power BI
Python	Data Engineering	SSAS	ADF
Data Modelling	Data Warehouse	Event Hub	
Data Lakehouse	Microsoft Fabric	Synapse	
Databricks	Pyspark	Hadoop	Hive
Spark	Spark SQL	Data Visualization	
Scoop	Azure Functions	C#	DBT
Blob Storage	ADLS gen 2	Snowflake	
HBase	Pig	Airflow	AWS	S3 Bucket
Unity Catalog	Microsoft fabric		
MDX Cubes			

Certificates

HL7	Microsoft 70-467
Azure Fundamentals AZ-900	

Languages

English	Hindi	Gujarati

Microsoft Certified Developer with 12+ years of demonstrated history of working in the US Healthcare, Finance, Insurance & ERP software industry. Involved in building data pipelines, ETL jobs primarily in Azure using Databricks and ADF. Proficient in data cleaning, data processing, data transformation using programming languages like Python, SQL & PySpark. Currently looking for a job profile with an opportunity to work, experiment and grow in the latest technology and development trend.

Industry Experience:

Freelancer

Sr. Data Engineer | Jan 22 - Present

- Designed, built, and maintained scalable data pipelines and ETL processes using tools like Apache Spark, Hadoop, Kafka, and Python, resulting in a 30% increase in data processing efficiency.
- Collaborated with cross-functional teams to gather and analyze business requirements, translating them into technical specifications and database designs that meet organizational needs and objectives.
- Optimized data storage and retrieval by designing and implementing data models in cloud-based environments (AWS, GCP, Azure) and data warehouses such as Redshift, BigQuery, and Snowflake.
- Developed distributed systems for real-time and batch data processing using Spark Streaming, Kafka, and Flink, reducing latency for data ingestion by 40%.
- Managed database administration tasks such as backup and recovery, database monitoring, and security management to ensure high availability, reliability, and security of database systems.
- Implemented Unity Catalog to centralize data governance across multiple Databricks workspaces, ensuring consistent data access policies and security protocols.
- Implemented data migration, transformation, and integration processes using Azure ADF, Databricks or other ETL (Extract, Transform, Load) tools, ensuring seamless data flow between systems and applications.
- Conducted performance tuning and optimization of queries and database objects, identifying and resolving performance bottlenecks, and optimizing query execution plans to improve system performance.
- Created and maintained highly optimized SQL queries for complex data retrieval tasks, improving query performance by 35% across large-scale datasets.
- Built data ingestion pipelines using tools such as Apache Sqoop and Kafka to ingest millions of records per day from external systems into Hadoop.
- Monitored and debugged data pipelines, leveraging logging frameworks and cloud monitoring tools, leading to a 50% decrease in system failure resolution time.
- Developed and maintained database documentation, including data dictionaries, entity-relationship diagrams (ERDs), and technical specifications, facilitating system maintenance and knowledge sharing among team members.
- Integrated Unity Catalog with existing data lakes and warehouses, streamlining data discovery, classification, and lineage tracking for improved governance.

Civica

SQL Report Developer | Jun 21 - Jan 22

- Implemented drill-through and drill-down functionalities in Power BI reports to enable users to navigate from summary-level insights to detailed data and back, enhancing data exploration and analysis capabilities.
- Designed and developed interactive drill-through reports in Power BI to provide contextual details and related information based on user interactions with specific data points or visualizations.
- Utilized Power BI features such as bookmarks, buttons, and page navigation to create intuitive drill-down experiences within reports, allowing users to explore data at different levels of granularity.
- Implemented Row-Level Security (RLS) in Power BI to enforce data access controls and restrict user access to sensitive or confidential data based on predefined security roles and permissions.
- Collaborated with stakeholders to define security requirements, identify data access requirements, and implement RLS rules and filters within Power BI reports and datasets.
- Designed and configured security roles, user groups, and role assignments within Power BI Desktop or Power BI Service to enforce data access controls and ensure compliance with organizational security policies.
- Conducted testing and validation of RLS configurations to ensure data security and integrity, troubleshooting any issues or discrepancies identified during testing.
- Provided training and support to end users on how to effectively use drill-through and drill-down features, as well as RLS security controls within Power BI reports, ensuring user understanding and adoption.
- Documented RLS configurations, security policies, and user access permissions within Power BI reports and datasets, maintaining comprehensive documentation for audit and compliance purposes.
- Stayed abreast of new features, updates, and best practices in Power BI development and security, continuously enhancing skills and knowledge through self-learning, training, and professional development activities.
- Designed and customized interactive visualizations, charts, and graphs within Power BI reports to present data insights in a clear, concise, and actionable format, tailored to end user preferences and requirements.
- Integrated data from diverse sources including SQL databases, Excel files, CSV files, web APIs, and cloud platforms into Power BI datasets using Power Query Editor and data connectors.
- Implemented advanced DAX calculations and measures within Power BI reports to perform calculations, aggregations, and comparisons across multiple data sources and dimensions.

Insynch

Database Developer | Aug 20 - Apr 21

- Developed and maintained a wide range of SSRS / Power BI reports, including operational, financial, and performance reports, to meet the diverse reporting needs of the organization.
- Collaborated with business users and stakeholders to gather report requirements, translate them into technical specifications, and design efficient and intuitive report layouts.
- Utilized SQL Server Data Tools (SSDT) and Report Builder to create and customize SSRS reports, incorporating features such as tables, charts, parameters, and drill-down capabilities.
- Implemented data visualization techniques and best practices to present data in a clear, concise, and actionable format, enabling end users to make informed business decisions.
- Designed and optimized SQL queries and stored procedures to retrieve data from various data sources, ensuring optimal performance and data accuracy in SSRS / Power BI reports.
- Implemented security measures and access controls in SSRS / Power BI reports to restrict data access based on user roles and permissions, ensuring compliance with data privacy regulations.
- Conducted testing and validation of SSRS / Power BI reports to ensure accuracy, completeness, and adherence to business requirements, resolving any issues or discrepancies identified during testing.
- Provided user training and support to enable end users to effectively utilize SSRS / Power BI reports and leverage the full capabilities of the reporting platform.
- Collaborated with IT teams and database administrators to troubleshoot and resolve technical issues related to SSRS / Power BI report development, deployment, and performance optimization.
- Stayed abreast of emerging trends and technologies in reporting and business intelligence, continuously enhancing skills and knowledge in SSRS development and data visualization techniques.

Allscripts

MSBI Developer | Jul 12 - Aug 20

- Designed, developed, and maintained end-to-end Business Intelligence (BI) solutions using the Microsoft BI stack, including SQL Server Integration Services (SSIS), SQL Server Analysis Services (SSAS), and SQL Server Reporting Services (SSRS).
- Collaborated with stakeholders to gather and analyze business requirements, translate them into technical specifications, and design scalable and efficient BI solutions to meet organizational needs.
- Developed ETL (Extract, Transform, Load) processes using SSIS to extract data from various sources, transform and cleanse it, and load it into data warehouses or data marts for reporting and analysis purposes.
- Designed and implemented OLAP cubes and tabular models using SSAS to provide multidimensional and tabular data analysis capabilities for business users, enabling interactive data exploration and ad-hoc reporting.
- Created and maintained reports and dashboards using SSRS to present actionable insights and key performance indicators (KPIs) to business users, executives, and stakeholders, enabling data-driven decision-making.
- Conducted performance tuning and optimization of BI solutions, including database queries, ETL processes, and report rendering, to improve system performance, scalability, and responsiveness.
- Implemented security measures and access controls within BI solutions to protect sensitive data and ensure compliance with regulatory requirements such as GDPR, HIPAA, and SOX.
- Provided training and support to end users on how to effectively use BI tools and solutions, including conducting workshops, creating documentation, and providing one-on-one assistance as needed.
- Collaborated with cross-functional teams including business analysts, data scientists, and software developers to integrate BI solutions with other systems and applications, ensuring seamless data flow and interoperability.
- Stayed abreast of emerging technologies, trends, and best practices in BI and data analytics, continuously enhancing skills and knowledge through self-learning, training, and professional development activities.
- Developed and maintained database documentation including data dictionaries, entity-relationship diagrams (ERDs), and technical specifications, facilitating system maintenance and knowledge sharing among team members.
- Implemented data migration, transformation, and integration processes using SQL tools and technologies such as SQL Server Integration Services (SSIS), ensuring seamless data flow between systems and applications.
- Conducted performance tuning and optimization of SQL queries and database objects to improve system performance, responsiveness, and scalability, identifying and resolving performance bottlenecks and inefficiencies.
- Proficient in writing complex SQL queries to retrieve, manipulate, and analyze data from relational databases, utilizing advanced SQL features and functions to address diverse business requirements.
- Familiarity with advanced SQL features such as stored procedures, triggers, and user-defined functions (UDFs), and ability to write complex queries incorporating these elements to implement business logic and data processing tasks.
- Strong understanding of SQL performance tuning techniques, including query optimization, indexing strategies, and database configuration settings, to optimize query performance and minimize resource utilization.
- Experience in troubleshooting and debugging complex SQL queries, identifying and resolving performance issues, data inconsistencies, and logic errors to ensure accuracy and reliability of query results.
- Proven track record of delivering high-quality SQL solutions to meet business objectives, collaborating with stakeholders to understand requirements, develop solutions, and deliver timely and effective results.

Projects

Project Name : Business Banking

Technology : PySpark, Spark SQL, RDD, Datalake house, Microsoft fabric, Power BI.

Client Name: Backbase, Netherland

Roles & Responsibilities:

- Developed a pipeline to pull the data from Blob storage and load in the datalake house.
- Build the datalake house and following the mattalan Architecture.
- Created different KPIs for Power BI report.
- Implemented the Row Level security.
- Created calculated columns and measures with the use of DAX Expressions like Aggregate, Time & Date Functions. Writing DAX, and Power Query formulas and creating KPIs based on client requirements.
- Developed Power BI Reports, Custom Visuals, Group Creation and Effective Dashboards after gathering and translating End-User Requirements.

Project Name : Sales Performance Dashboard

Technology : Salesforce, Power BI, SQL

Client Name : Goodyear, USA

Roles & Responsibilities:

- Developed an interactive Power BI dashboard to analyze and visualize sales performance, resulting in a 15% increase in sales productivity.
- Implemented dynamic filters and slicers for regional sales teams, enabling them to drill down into specific metrics and identify growth opportunities.

Project Name : Financial Forecasting Model

Technology : Salesforce, Power BI, SQL

Client Name : Johnson & Johnson, USA

Roles & Responsibilities:

- Designed and implemented a financial forecasting model in Power BI, integrating data from multiple sources to provide accurate predictions.
- Leveraged D3.js to design highly customized scatter plots and bubble charts, allowing for detailed exploration of multivariate datasets.
- Enhanced the visuals with tooltips and dynamic sizing options for an intuitive user experience.
- Utilized time intelligence functions to create dynamic forecasts, aiding the finance team in making strategic decisions and reducing forecasting errors by 20%.

Project Name : Healthcare Claims Dashboard

Technology : SQL Programming, SSIS

Client Name: PIH Hospital, USA

Roles & Responsibilities:

- Developed different CRUD applications for users to Insert, Update And Delete the records.
- ability to write and troubleshoot SQL Code and design (stored Procedure, functions, tables, views, triggers, indexes, constraints, Jobs, Performance Tuning)
- Created SSIS packages included a variety of transformations, for example Slowly Changing Dimensions, Look up, Aggregate, Derived Column, Conditional Split, Fuzzy Lookup, Multicast and Data Conversion.

Project Name : Healthcare Analytics

Technology : SQL Programming, SSIS, SSRS, SSAS, C#

Client Name : Brown & Toland, USA

Roles & Responsibilities:

- Involved on the requirement gathering and effort estimations for the Project.
- Designed the data model, deployment architecture, hardware sizing for the Data Services requirement implemented using SQL Server.
- Worked on design for the Azure migration approach of the On-Prem Data Warehouse.
- Created SSIS packages to load the data from legacy data source system to SQL Server. Implemented a variety of transformations, for example Slowly Changing Dimensions, Look up, Derived Column, Conditional Split, Fuzzy Lookup, Multicast and Data Conversion.
- Involved in creation of Tabular Data Model and DAX calculations for SSAS.
- Hosted the SSAS services on IIS for the HTTP Access.
- Involved on the requirement gathering and effort estimations for the different RFPs