

Vamshi Krishna U

Data Analyst

Phone: +1 980 216 8770 | | Mail: uggevamshikrishna@gmail.com | | www.linkedin.com/in/vamshi-krishna-u-3529a52b8

Profile Summary:

- With over 10+ years of experience in the IT industry, I am a skilled Data Analyst who has successfully implemented data analysis using simple machine learning algorithms.
- Expertise lies in SQL Server and T-SQL, where I excel in designing and creating tables, views, indexes, and more. I apply my skills in data analysis, verification, and problem-solving to address inquiries and issues.
- Effectively utilized T-SQL constructs such as joins, subqueries, derived tables, and views to query data.
- Possess in-depth knowledge of importing data from various sources such as Flat Files, MS Excel, raw files, and databases, and exporting it to different destinations using SSIS.
- Have a strong understanding of ER modeling, dimensional modeling, Star and Snowflake Schemas, and have developed Conceptual, Logical, and Physical data models using tools like Erwin/Power Designer.
- Hands-on experience working with high availability methodologies for Azure Cloud and Azure SQL.
- Demonstrated my technical acumen by utilizing database diagrams, Erwin, and other data modeling tools to apply normalization techniques.
- Applied my skills in data analysis, verification, and problem-solving to address inquiries and issues.
- Experience constructing tables, joins, indexed views, indexes, complex stored procedures, triggers, and useful functions to ensure efficient data manipulation and consistent data storage according to business rules, using SQL Server and T-SQL (DDL, DML, and DCL).
- Experienced in designing informative visualizations using Power BI software.
- Led data mapping, exploratory data analysis, and logical data modeling between source and destination systems.
- Well-versed in SQL Profiler and Query Analyzer, utilizing these tools to enhance SQL server performance through query tracing and tuning. I have also designed and customized data models for real-time data warehouses supporting multiple sources.
- Created hierarchies in Power BI reports using data visualizations such as bar charts, line charts, pie charts, and forecast charts.
- Specialize in designing, developing, and publishing rich, interactive SSRS and Power BI reports, dashboards, and scorecards with a wide range of visualizations, including bars, lines, and pipes.

Technical Skills:

SDLC:	Agile, Scrum, Waterfall, and Spiral, MLFLOW, Optuna
Data Modeling:	ER-win, MS Visio
Database:	SQL Server 2016, 2014, 2012, 2008/R2
Source Control & Collaboration Tool:	Team Foundation Server (TFS)
Reporting Tools:	SSRS, Power BI, Excel Power BI Desktop, Power BI Services
Database Programming:	T-SQL, Dynamic SQL, MDX, DAX, R Language
Integration Tool:	SSIS
Analysis Services:	SSAS, OLAP Cubes, Tabular Model
Development Tools:	BIDS, SSDT, SSMS

Organizational Experience:

Client: JP Morgan Chase Tampa, FL
Data Analyst

March 2023 - Present

- Facilitated requirement gathering sessions, collecting business and functional requirements, and documenting them in functional requirement and business requirement documents. Conducted feasibility studies, gap analysis, risk analysis, and process analysis, while also leading business process modeling.

- Implemented multiple database objects to fulfill the requirements of data marts.
- Designed data warehouses and data marts using star schemas, snowflake architecture, and Kimball dimensional modeling.
- Leveraged data analysis techniques to validate business rules and identify missing data of low quality in the existing enterprise data warehouse.
- Created various artifacts for projects, including specification documents for data mapping and data analysis.
- Conducted data mapping, exploratory data analysis, logical data modeling, and gap analysis between source and destination systems.
- Gained an understanding of business processes and data models to perform data analysis and align requirements with the source systems.
- Participated in weekly and daily meetings with Business Users/Analysts to discuss the scope and requirements of the data warehouse.
- Wrote SQL queries to validate data in staging tables and data warehouse tables, ensuring accurate results.
- Optimized SQL scripts by incorporating User-Defined Functions (UDFs), Common Table Expressions (CTEs), stored procedures, and leveraging the SQL Profiler tuning advisor.
- Ensured data integrity by creating various constraints and Data Manipulation Language (DML) triggers in relational databases.
- Developed T-SQL database objects such as tables, views, indexes, stored procedures, and constraints. Also wrote ad-hoc SQL queries to test end-to-end processes.
- Monitored and resolved deadlocks in SQL Server databases using locks, isolation levels, and the SQL Profiler.
- Created complex stored procedures, functions, tables, views, and other T-SQL code, as well as utilized SQL joins for application development.
- Enhanced query performance through modifications of T-SQL queries, table normalization, establishing appropriate joins, and creating necessary indexes.
- Created individual SSIS packages for loading dimensions and fact tables and developed an ETL master package for loading data into the data mart.
- Implemented complex mathematical calculations in Power BI Desktop using table calculations and DAX expressions.
- Developed analytical reports and dashboards from multi-dimensional models in Power BI to identify critical Key Performance Indicators (KPIs).

Environment: SQL Server, ETL, SSIS, SSMS, SDLC, T-SQL, Power BI, Power BI Desktop, MongoDB, DAX, Erwin, TFS, SQL Profiler, AI, ML, Python, XGBoost, Guidewire

Client: Elevance Health Minnetonka, MN
BI Data Analyst

April 2021 - February 2023

- Actively participated in Agile and Scrum meetings, including Sprint Planning, Sprint Check-In, Daily Scrum, Sprint Review, and Retrospective. Also facilitated these meetings when required.
- Contributed to data modeling efforts, designing, and building relational databases.
- Collaborated with business owners to identify crucial data elements for ongoing monitoring and ensure high data quality within the data warehouse.
- Utilized cloud data pipelines for efficient extraction, transformation, and loading of data from diverse sources, while creating meaningful visualizations for informed decision-making.
- Developed and maintained comprehensive repositories of data model and dataflow diagrams related to the data warehouse.
- Enhanced report performance by optimizing data sets, implementing report caching and snapshots, and considering networking aspects.
- Created data warehouses using Snowflake Schema and Star Schema, aligning them with specific business requirements.
- Implemented exploratory data analysis by employing simple machine learning algorithms.

- Developed various statistical machine learning and data mining solutions to address diverse business problems, presenting insights through data visualizations.
- Established data analysis infrastructure to collect, analyze, and visualize data, conducting analysis on both source and target data. Conducted data quality assessments using data profiling concepts and tools.
- Conducted data analysis and profiling on source data to gain deeper understanding of data sources.
- Developed and implemented predictive models for data analysis purposes.
- Incorporated dynamic SQL to create customizable queries that can be answered by the OLTP Server.
- Redesigned and optimized existing stored procedures, triggers, User-Defined Functions (UDFs), and views to improve query performance.
- Optimized database queries for enhanced performance and utilized T-SQL views and triggers.
- Created and updated statistics to optimize SQL Server performance.
- Utilized various components of SSIS, such as Conditional Split, Derived Column, Script Task, and Script Component, for data scrubbing, validation, and advanced transformations during the ETL process.
- Designed complex, data-intensive reports in Power BI, leveraging a range of graph features including gauges, funnels, and line charts for comprehensive business analysis.

Environment: SQL Server, SSDT, T-SQL, SQL Profiler, Erwin, SSMS, ETL, SSIS, Power BI, TFS, Guidewire, EHS

Client: American Express, Phoenix, AZ

December 2019 - March 2021

SQL Data Analyst

- Collected business requirements and identified data and reporting needs for each project.
- Utilized data analysis techniques to validate business rules and detect missing data of low quality in the existing enterprise data warehouse (EDW). Conducted data analysis to identify trends and clusters.
- Participated in all stages of data mining, including data collection, data cleaning, model development, validation, visualization, and data analysis.
- Conducted requirements gathering and data analysis for customer contact history in customer relationship management, performing complex SQL-based data analysis and data profiling on various source systems.
- Utilized the Data Experimentation Assistant to perform workload-based analysis, identifying queries with compatibility errors, degraded queries, query plans, and other workload comparison data.
- Wrote SQL stored procedures to identify duplicates and handle incremental loading while managing errors.
- Created complex stored procedures, functions, tables, views, and other T-SQL code, incorporating SQL joins for application development.
- Wrote various T-SQL codes, stored procedures, and user-defined functions to fulfill customer requirements.
- Performed T-SQL tuning operations at multiple levels, including embedding code into stored procedures, optimizing indexes and partitions, using tools like SQL Profiler and Database Engine Tuning Advisor.
- Contributed to the development of custom functionalities in T-SQL by writing functions.
- Troubleshoot critical performance, space, availability, and other issues using T-SQL.
- Implemented database objects such as stored procedures and indexes using T-SQL to create complex scripts.
- Created data-driven packages in ETL-SSIS to automate the referral process.
- Utilized Power BI Desktop to prepare various visualizations, gaining insights and identifying trends in business processes.

Environment: SQL Server, Erwin, SSDT, T-SQL, ETL, SSIS, SAS, SQL Profiler, SSMS, Power BI, Power BI Desktop, MongoDB, DAX, Guidewire

Client: Robinhood Menlo Park, CA

October 2018 to November 2019

BI Analyst

- Participated in daily stand-up meetings to provide project updates to the internal development team.
- Conducted data modeling for the application and created an ER diagram using Erwin.
- Developed ER diagrams for the proposed data mart using Erwin.
- Created stored procedures, functions, and database triggers, ensuring referential integrity, and implementing complex business logic.

- Collaborated in data model reviews with internal data architects, business analysts, and business users, explaining the data model in detail to ensure alignment with business requirements.
- Took responsibility for requirements gathering, scope analysis, and design review of the Business Requirements Document (BRD).
- Analyzed gaps between existing and target business/data architecture and assessed the impact on data migrations.
- Assisted in building a business analysis process model.
- Maintained and analyzed large datasets used by domain experts for risk analysis.
- Conducted GAP analysis of business rules, business and system process flows, user administration, and requirements.
- Designed and created a data mapping document by analyzing data sources and mapping them to the data mart schema.
- Gained understanding of fundamental concepts in business analysis, including logical data modeling, data flow processing, and database design.
- Planned and managed the delivery of a performance dashboard solution and analytics platform for advanced analytics.
- Translated business requirements into technical requirements and conducted analysis of data gaps.
- Collaborated with business stakeholders to understand their decision-making criteria and analyzed available data to build reports and manage deliveries.
- Implemented dynamic SQL to develop customizable queries that could be answered by the OLTP Server.
- Optimized queries by modifying T-SQL queries and eliminating redundant data.
- Customized roles and Key Performance Indicators (KPIs) using multi-dimensional expressions (MDX) in SSAS.
- Developed list reports in SSRS for sending emails with bill amounts and other details.
- Scheduled report deliveries to multiple users using subscriptions.

Environment: SQL Server, Erwin, SSDT, T-SQL, SSIS, SSMS, SSAS, SSRS, TFS

Client: SMGPL, Bangalore, India
SQL Data Developer

July 2013 - September 2017

- Gathered and analyzed business requirements, converting them into design specifications, unit test plans, and resolving client issues.
- Actively participated within a scrum team, contributing daily.
- Performed data analysis during development, reporting findings to the team, and assisting with production support activities.
- Designed a data migration strategy for populating the data mart with facts and dimensions.
- Translated business requirements into logical and physical data models.
- Created stored procedures, functions, and packages to implement business logic and meet business requirements.
- Participated in security-related tasks, such as creating user logins, roles, permissions, and granting database access.
- Supported the architecture and design of the data warehouse, data marts, and BI reports to facilitate data initiatives.
- Wrote dynamic SQL scripts to perform bulk operations in an OLTP environment.
- Provided SQL tuning recommendations for report queries to optimize performance in high-volume scenarios.
- Developed data reconciliation SQL queries to validate overall data migration.
- Created complex SQL queries, derived tables, common table expressions (CTEs), stored procedures, views, and user-defined functions (UDFs).
- Utilized complex SQL structures, including while loops, if...else statements, case statements, and temporary objects.
- Worked with various SSIS tasks, such as Transform Data Task, Execute SQL Task, and Active Script Task.
- Contributed to strategic projects, ETL design and architecture, and performance tuning activities.
- Provided estimations for ETL design, development, and unit testing based on business requirements.

Environment: SQL Server, T-SQL, SSIS, ETL, SSAS, SSMS, SSDT, SQL Profiler, Erwin, DTA