**Ganesh Kumar Murugandi**

**Sr. Data Analyst**

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**C2C**

**H1b**

**Willing to go DAY 1 ONSITE across USA**

***Over 9+ years of Professional Experience in different environments and platforms including Business Analysis, Data Analysis, data warehousing, data visualization using Tableau, Power BI and querying using SQL language.***

**Professional Summary:**

* Sr. Data analyst with a proven track record of conducting in-depth analysis of complex datasets, extracting actionable insights for informed decision-making.
* Applied data analytics expertise to optimize transportation logistics, reducing costs and improving efficiency in supply chain operations.
* Healthcare Analytics: Leveraged data-driven insights to enhance patient outcomes and operational efficiency within healthcare organizations, driving improvements in service delivery and resource allocation.
* Financial Risk Management: Played a key role in financial risk management initiatives, utilizing advanced modeling techniques to assess and mitigate risks in lending portfolios and investment strategies.
* Expertise in building and implementing robust data analysis frameworks, demonstrating a systematic approach to solving analytical challenges.
* Skilled in designing and implementing Python scripts for data manipulation, analysis, and visualization, coupled with a strong command of SQL for efficient data extraction and transformation.
* Experienced in implementing data cleaning procedures and configuring preprocessing pipelines to enhance the quality and reliability of raw datasets.
* Adept at designing interactive dashboards in Power BI for visualizing key performance indicators, as well as creating customized data visualizations using matplotlib and seaborn in Python.
* Have extracted data from various database sources like Oracle, SQL Server, accessing JIRA tool and other internal issue trackers for the Project development.
* Extensive experience with OLTP and OLAP System and E - R modeling, developing Database Schemas like Star schema and Snowflake schema used in relational and dimensional modeling.
* Expertise in generating data visualizations using python and creating dashboards using tools like Tableau.
* Experienced on maintaining and managing Tableau reports, and publishing to the end users for Executive level Business Decision.
* Expertise with data cleansing, data matching, data conversion, data profiling, exception management, reporting and monitoring functions.
* I’ve worked as a Research Assistant for a professor and helped him with his research work as a part of graduate studies.
* Expertise in Data modeling (Dimensional & Relational) concepts like Star-Schema Modeling, Snowflake Schema Modeling, Fact and Dimension tables.
* Strong experience in Data Analysis, Data Cleansing, Transformation, Integration, Data Import, and Data Export using multiple ETL tools such as Informatica Power Centre
* Hands-on Experience using visualization tools like Tableau to create interactive report using different charts like bar chart, pie chart, line chart and area chart.
* Good Knowledge in the ETL (Extract, Transform and Load) of data into a data warehouse or date mart and Business Intelligence (BI) tools.
* Strong proficiency in SQL databases like oracle, SQL server
* Experience in writing SQL queries and optimizing queries.

**Technical Skills**

|  |  |
| --- | --- |
| Data Visualization | Tableau, Power BI, Seaborn, Matplotlib  |
| Python Libraries | Pandas, SciPy, NumPy, Seaborn |
| Language & scripting | Python, SQL, JSON |
| Database Tools | Snowflake, My SQL, SQL Server, Oracle  |
|  Tools | Erwin, Jira, Excel, Confluence, STATA, Jupiter Notebook, Geotab, MS Office |
| Extract Transform Load (ETL) | Informatica |
|  Coursework  | Google Analytics, AWS, Google AdWords, Statistics |

**Professional Experience**

**Client:** Department of Education, New York City **July ’23 to Present**

Sr. Data Analyst

The objective of the project is to help the office of pupil transportation team to track the progress of VIA project module and driver subscription rate of school bus by creating reports using Power Bi and excel.

**Responsibilities:**

* Developed power BI reports and created an application on Power Bi services as central repository for all the reports. The application created included many independent reports which helped the management to access the report and compare their progress.
* development and implementation of reporting solutions using Power BI and Excel to track the progress of the VIA project module and driver subscription rate of school buses for the Office of Pupil Transportation.
* Utilized AWS services including EC2, S3, SNS, Lambda, IAM, and Snowflake for efficient data management and processing.
* Executed ETL processes and techniques to ensure seamless data flow and integration across platforms.
* Proficiently used ANSI SQL, Python, and APIs to extract, transform, and load data for analytical purposes.
* Actively participated in time-sensitive projects within a collaborative, multi-disciplinary team environment.
* Demonstrated expertise in RDBMS platforms such as MS SQL Server, MySQL, and Postgres for robust data storage and retrieval.
* Utilized MS Excel and Snowflake Schema to perform advanced data analytics and modeling.
* Contributed to project management activities ensuring timely delivery and adherence to project requirements.
* Implemented JavaScript functionalities to enhance data visualization and user experience.
* Conducted data profiling and analysis to derive actionable insights for decision-making processes.
* Ensured data management best practices including data lineage, metadata management, and data quality control.
* Developed business requirements and user stories using JIRA for effective project planning and execution.
* Implemented process improvements to optimize data workflows and enhance operational efficiency.
* Operated in Agile Scrum & Kanban environments, facilitating seamless project management and collaboration.
* Engaged in continuous improvement efforts to refine data analysis methodologies and reporting techniques.
* Familiarity with ITIL, ITSM, and ServiceNow for effective IT service management.
* Collaborated with internal and external stakeholders to gather and document requirements for data-driven projects.
* Developed and mentored team members in analytical programming languages such as SAS, Python, and R.
* Led the development and governance of AI and machine learning models, ensuring compliance with model risk management standards.
* Presented executive-level reports and insights to internal and external stakeholders, demonstrating strong communication skills.
* Actively contributed to the development of explainable AI algorithms and frameworks, emphasizing transparency and accountability.
* Managed large datasets in a business environment, ensuring data integrity and accuracy.
* Proficiency in Microsoft Office suite, Visio, and collaboration tools for effective documentation and communication.
* Utilized advanced Excel functions and VBA macros for data analysis and visualization.
* Demonstrated effective communication skills in bridging technical and non-technical teams.
* Managed relationships with external vendors for product and service procurement.
* Experience with ServiceNow platform including Asset Management, CI Management, and Catalog Management.
* Familiarity with PC/Device as a Service implementation for efficient IT asset management.
* Proficiency in Informatica IDQ and IICS for data quality management and integration.
* Conducted in-depth analysis of complex datasets, extracting meaningful insights for decision-making.
* Built and implemented data analysis frameworks to systematically approach and solve analytical challenges.
* Developed and applied statistical methods to analyze and interpret data, ensuring robust and reliable results.
* Used statistical techniques for hypothesis testing and created predictive models for business forecasting.
* Designed and implemented Python scripts for data manipulation, analysis, and visualization.
* Utilized SQL to extract and transform data from databases, optimizing queries for efficiency.
* Implemented data cleaning procedures to enhance the quality and reliability of raw datasets.
* Developed and configured data preprocessing pipelines to handle missing or inconsistent data.
* Designed and configured interactive dashboards in Power BI for visualizing key performance indicators.
* Used matplotlib and seaborn in Python to create customized data visualizations for detailed analysis.
* Managed and configured databases to store and retrieve large volumes of data for analysis.
* Developed and optimized database queries for performance improvements in data retrieval processes.
* Collaborated with business stakeholders to understand data requirements and align analytical solutions with business objectives.
* Translated business needs into data-driven insights and recommendations, contributing to strategic decision-making.
* Developed and used advanced Excel functions for data analysis, reporting, and modeling.
* Built and configured Excel-based models for forecasting and budgeting purposes.
* Applied critical thinking skills to identify and address challenges in data analysis projects.
* Involved in the development of innovative solutions to enhance the efficiency of analytical processes.
* Prioritized and managed multiple analytical tasks, ensuring timely completion of projects.
* Provided regular updates on project progress, ensuring transparency in the workflow.
* Validated and reviewed data with meticulous attention to detail to ensure data accuracy and reliability.
* Implemented quality checks on analytical outputs to maintain high standards of data integrity.
* Developed a deep understanding of the industry domain, incorporating domain knowledge into data analysis processes.
* Stayed informed about industry trends and applied relevant insights to enhance the context of data analysis.
* Adhered to ethical standards in handling sensitive data, ensuring compliance with privacy regulations.
* Implemented and configured data security measures to protect sensitive information during analysis.
* Clearly communicated complex technical findings to non-technical stakeholders through reports and presentations.
* Designed and implemented communication strategies to convey data-driven insights in a comprehensible manner.
* Proactively sought opportunities for professional development, staying updated on the latest tools and methodologies.
* Involved in the continuous learning and implementation of emerging technologies to enhance data analysis capabilities.
* Created the repository of dataset related to OPT team and shared it on power BI services and Share point for others to access and understand.
* Worked alongside with the fleet team and helped them to identify the key metrics which affected the driver subscription rate like Active drivers with no login attempts, inactive drivers.
* Helped the fleet team identify the trend and pattern of error messages received by the drivers when logging on driver application to prevent the login issue and improve their subscription success rate
* Developed the full comprehensive report to help the team management to track and understand the progress of Route Manager module project by displaying the KPI like Requirement completion rate with user story and the business requirements.

**Environment:** Power BI, Excel, Geotab, CRS System, JIRA

**Client: Capital one, McLean, VA July ’21 to June ‘23**

 **Data Analyst**

**Responsibilities:**

* Created reports using different visualizations (Stacked bar Chart, Scatter Chart, Pie Chart, Donut Chart, Line & Chart, Heat map, Tree map) in Tableau according to the requirements.
* Utilizing AWS services such as EC2, S3, SNS, Lambda, IAM, and Snowflake for architecting and deploying scalable data solutions.
* Demonstrating proficiency in ANSI SQL, Python, and APIs for seamless data retrieval and manipulation.
* Participating in time-sensitive projects within highly collaborative, multi-disciplinary team environments, ensuring timely delivery of project milestones.
* Leveraging structured analysis methodologies to gather comprehensive requirements, documented as JIRA stories, to streamline project workflows.
* Applying expertise in the lending business, specializing in mortgage lending and mortgage servicing, along with proficiency in product lifecycle management (PLM) systems and Bills of Material (BOM).
* Implementing data control governance frameworks, remediating data defects/issues, and documenting data flows/processes to ensure data quality and integrity.
* Utilizing advanced statistical analysis and modeling techniques for financial analysis, cost analysis, and internal controls.
* Providing clear technical direction and mentorship to team members, fostering growth in analytical programming languages such as Python, SAS, or R.
* Developing AI and machine learning models, ensuring compliance with model risk management and governance standards, including bias mitigation and explainable AI (XAI).
* Demonstrating expertise in a wide range of tools and technologies including Tableau Desktop, Microsoft Excel, Snowflake Schema, Microsoft SQL Server, and Informatica IDQ/IICS.
* Actively participating in process improvements initiatives, driving efficiencies across data management workflows, and enhancing overall operational performance.
* Integrating ITIL and ITSM practices, leveraging tools like Service Now for asset and catalog management.

**Toyota, Plano, TX**  **June ‘20** to **July ‘21**

**Data Analyst**

**Responsibilities:**

* Involved in creating different reports based on business requests and ad hoc requirements using Tableau desktop. Prepare financial deliverables (quarterly, sales and budgetary reports) for stakeholders to illustrate KPI metrics.
* Developed Interactive Tableau reports after gathering and analyzing the data from the warehouse to illustrate KPI of the sales.
* Identified inconsistencies in data collected from different sources and worked with business owners to assess business impact.
* Experience in data modeling principles and methods including conceptual, logical & physical Data Models.
* Responsible for building and maintaining effective working relationships with business teams, as well as external vendor and stakeholder.
* Conducted evaluation of business workflow and implemented process improvement for the internal system.
* Evaluate data models or reports in the ETL process for quality and accuracy and make well-reasoned recommendations backed up by strong data visualizations to support the business team.
* Transformations of requirements into data structures, which can be used to efficiently store, manipulate, and retrieve information.
* Collaborated with data modelers and ETL developers in creating data dictionary and design documents.
* Involved in migration projects to migrate data from data warehouses on Oracle and migrated those to Teradata.
* Writes various SQL statements for data generation for the purpose of analysis.
* Worked with project team representatives to ensure that logical and physical ER Studio data models were developed in line with corporate standards and guidelines.
* Used data analysis techniques to validate business rules and identify low quality for Missing data in the existing Bank data warehouse EDW.
* Also worked on some impact of low quality and or missing data on the performance of data warehouse client.
* Experience with modeling tools such as (but not limited to) ERWIN and oracle.
* Performed Data Analysis and Data validation by writing complex SQL queries.

**Environment:** Oracle Database 11g, Oracle BI tools, Tableau, MS-Excel, Python, MS Access, JIRA, SQL

**Premier Inc, Charlotte, NC Nov ‘19 to May ‘20**

**Gavs Technologies**

**Business Data Analyst
Responsibilities:**

* Prepared weekly and monthly project status reports using JIRA and SQL and delivered it to appropriate project team members and stakeholders.
* Utilize AWS cloud components including EC2, S3, SNS, Lambda, IAM, and Snowflake for efficient data storage, processing, and analysis in a healthcare environment.
* Employ ETL tools and techniques for seamless data extraction, transformation, and loading to ensure data integrity and consistency.
* Demonstrate proficiency in ANSI SQL, Python, and APIs to perform data analysis, modeling, and visualization for strategic decision-making.
* Collaborate in multidisciplinary team environments to contribute to time-sensitive projects, ensuring alignment with healthcare industry standards and regulations.
* Engage with RDBMS platforms such as MS SQL Server, MySQL, and Postgres for data querying, manipulation, and management.
* Utilize Tableau Desktop and Excel for operations analytics, generating insights into healthcare processes and outcomes.
* Apply data profiling and analytics techniques to identify patterns, trends, and anomalies in healthcare datasets.
* Manage data lineage and metadata, ensuring data quality and governance across the organization.
* Actively participate in Agile Scrum and Kanban environments, contributing to process improvements and delivering business requirements as JIRA stories.
* Conduct financial analysis leveraging foundational RDBMS expertise and conditional logic to support mortgage lending and servicing operations.
* Facilitate continuous improvement initiatives and adhere to ITIL and ITSM practices for efficient service delivery and incident management.
* Collaborate with stakeholders to gather and document requirements, translating data into actionable insights for strategic decision-making.
* Utilize Microsoft Excel functions, SQL, and JSON/XML for data processing, reporting, and documentation, ensuring effective communication with both technical and non-technical teams.
* Engage with external vendors for product and service procurement, managing relationships and overseeing implementations.
* Possess deep technical understanding, mentoring team members in analytical programming languages and best practices for model development and governance.
* Develop AI and machine learning models, ensuring adherence to model risk management and governance frameworks.
* Deliver executive presentations to internal and external stakeholders, effectively communicating technical concepts and strategic insights.
* Maintain expertise in Informatica IDQ and IICS for business analytics, ensuring data quality and integrity throughout the data lifecycle.
* Experience with ANSI X12 EDI standards, particularly with 270/271, 834, 274, 278, 837P, 276/277, and 835, ensuring seamless electronic data interchange for healthcare transactions.
* Analyzed and provided documentation for transforming existing data from legacy applications and loading of this data into a new target application environment.
* Collaborated with the development team to analyze and understand business or user requirements to create detailed database design models as well as write programming code using SQL for applications to interact with databases.
* Worked on data that was a combination of unstructured and structured data from multiple sources and automated the cleaning using SQL scripts.
* Created Tableau scorecards, dashboards using stack bars, bar graphs, scattered plots, geographical maps, Gantt charts using show me functionality.
* Designed and implemented multiple dashboards using Tableau for KPI metrics.
* Participated in all phases of data mining, data collection, data cleaning, developing models, validation, and visualization.
* Created Report Level Filters, and Visual Level Filters on Tableau according to the requirements.
* Perform root cause analysis on smaller self-contained data analysis tasks that are related to assigned data processes.
* Work to ensure high levels of data consistency between diverse source systems including flat files, XML and SQL Database.
* Involved in translating the business requirements into data requirements across different systems.
* Maintained Excel workbooks, such as development of pivot tables, exporting data from external SQL databases, producing reports and updating spreadsheet information.
* Researched and fixed data issues pointed out by QA team during regression tests.
* Writes SQL Stored Procedures and Views and performs in-depth testing of new and existing systems.
* Manipulate and prepare data, extract data from database for business analyst using Tableau.
* Exploits power of MS SQL to solve complex business problems by data analysis on a large set of data.
* Strong Data modeling skills including Star Schema and Snow-Flake models and E-R modeling, Dimensional modelling.

**Environment:** SQL (Structured Query Language), Jupyter Notebooks, Jira Tableau Desktop, Microsoft Excel, Oracle database

**Dikita Enterprises Inc, Dallas, TX**  **Jun ’17 to Nov ‘19**

**Client: Dallas Area Rapid Transit Network**

**Data Analyst**

**Responsibilities:**

* Developed Interactive Tableau reports after gathering and analyzing the data from the warehouse.
* Worked extensively with databases related to transit projects, analyzed data patterns, and ensured data quality is attained.
* Performed data analysis on survey data using Regression machine learning algorithm on Jupyter notebook using python to infer insights related to day-to-day ridership counts and revenue generated.
* Performed data analysis and provided recommendations for developing strategies that lead to an increase in revenue by 7% and passenger count by 5%.
* Analyzed the historical documentation, supporting documentation, screen prints, e-mail conversations, presented business and wrote the business requirements document and got it electronically signed off from the stake holder.
* Handled anomalies in the data - removing duplicates, imputing missing values and treating null values using Python Scikit- learn.

**Environment**

MS SQL Server, SQL Enterprise Manager, Python, MS Excel, Tableau, ETL, MS Access, MS office, Outlook, Jupyter notebook

 **Tata Consultancy Service (TCS) June** ‘13 to June ‘16

**Chennai- India**

Client: Lloyds Bank

Business Analyst

**Responsibilities:**

* Creating Dashboards and visualization of different types for analysis, monitoring, management and better understanding of the business performance metrics.
* Provided maintenance support for the Lloyds banking software used by millions of users to create accounts, open overdraft.
* As a part of servicing support team, helped end users by resolving the issues faced by them while performing operations such as opening new accounts. Performed a vital role in improving the usability of banking software
* Involved in Creating Dashboards Scorecards, views, pivot tables, charts, for further data analysis.
* Define and communicate project scope, milestones and deliverables and projected requirements from clients.
* Use Tableau for SQL queried data, and data analysis, generating reports, graphics and statistical analysis.
* Involved in the report generation using the SQL advanced techniques like Rank, Row number etc.
* Analyze data using Tableau for automation and determine business data trends.
* Involved in Proving guidance for transitioning from Access to SQL Server.

**Environment**

MS SQL Server, SQL Enterprise Manager, MS Excel, Erwin, ETL, MS Access Java, Jira MS office, Outlook, Informatica

**Research Assistant at University of Texas Dallas Feb’18 to Nov ‘18**

* Worked on the project that addresses an existing State, national and global challenge, namely, the shortage of training and educational resources as well as the serious shortfall of skilled workers in the Information Technology domain.
* The dearth of skilled women and other minority groups in taking up college majors and careers in Information and Communications Technology cannot be undermined.
* The project is important to how core computing courses may be taught as it explored better ways to improve pedagogies, retention, and graduation rates in the college of Information Science & Technology at University of Texas Dallas
* As a part of the project, we conducted a survey for students on campus. Analyzed the data and created tableau reports to create many reports to showcase the trends and patterns of student perspectives on questions asked as a part of survey. Those reports helped our research work on how to improve the curriculum and inspire students to be a part of STEM classes.

**Education**

* B.S., Information Technology- Sastra University, 2013
* MS Business Analytics, University of Texas at Dallas 2018

**Key Skills:**

* AWS (EC2, S3, SNS, Lambda, IAM, Snowflake)
* ETL Tools and Techniques
* ANSI SQL
* Python
* RDBMS Platforms (MS SQL Server, MySQL, NoSQL, Postgres)
* Financial Experience
* Mortgage Lending and Mortgage Servicing
* Product Lifecycle Management (PLM)
* Project Management
* Data Profiling and Analytics
* Data Management and Governance
* Business Requirements Documentation
* Process Improvements
* Agile Scrum & Kanban Environments
* SQL Scripting
* ANSI X12 EDI Standards
* Data Quality Analysis
* Statistical Analysis and Modeling
* Model Development Lifecycle
* AI and Machine Learning Development
* Executive Presentation Skills
* Explainable AI (XAI) Algorithms
* AI Audit and Ethics Frameworks
* Spreadsheet Skills (MS Excel, Visual Basic)
* Microsoft Office Suite
* Service Now Platform
* Vendor Management
* PC/Device as a Service Implementation
* Informatica IDQ and IICS
* Microsoft Power Apps and Power BI
* Business Analytics