# **Mukesh Shirke**

Data Analyst / Consultant



## Summary

Data Analyst transitioning from 15 years in Data-Driven Oil & Gas Operations, specializing in operational optimization and risk management. Proficient across the full data lifecycle: Star Schema modeling, Statistical Analysis, SQL, Python, Power BI, and Tableau. Seeking to apply deep industry context and technical mastery to deliver actionable business insight.

## **Technical & Professional Skills**

- <u>Programming & Querying</u>: SQL MySQL, SQL Server (Queries, JOINs, CTEs, Window functions, Stored Procedures),
   <u>Python</u> (Pandas, NumPy, Matplotlib).
- <u>Data Analysis & Manipulation</u>: Data Cleaning, Data Transformation, Exploratory Data Analysis (EDA), Statistical Analysis, Trend Analysis, Data Validation.
- <u>Business Intelligence & Visualization</u>: Power BI (DAX, Power Query), Tableau, Advance Excel (LOOKUPs, Pivot Tables, Power Query), KPI Tracking, Data Storytelling, Actionable Business Insights.
- <u>Database & Data Management</u>: Data Modelling (Star & Snowflake Schema), ETL/ELT Processes, Structured and Unstructured Data (including raw data), Data Governance Awareness.
- <u>Professional Skills</u>: Problem-Solving, Stakeholder Management & Insight Delivery, Collaboration, Attention to Detail,
   Agile Awareness.

# **Data Analytics Portfolio Projects**

## From Schema to Strategy: Healthcare Performance Analysis with SQL and Python [Link]

- Initiated Data Understanding in Python (Pandas), profiling 8 operational tables to map relational schema.
- Engineered Star Schema in MySQL; performed database creation, data import → executed Data Cleaning and transformation via SQL to establish single source of truth.
- Conducted advanced Exploratory Data Analysis (EDA) using SQL (CASE logic, Subqueries, Window Functions) to calculate critical utilization and cost metrics.
- Established SQL-Python connection for in-depth Statistical Analysis → validated primary cost drivers through correlation and distribution checks.
- Translated findings into actionable business insight → delivered strategic recommendations on cost management and patient service quality.

#### Retail Operations Dashboard: SQL Database to Power BI KPI Tracker [Link]

- Engineered a fully normalized SQL database (3NF) to manage operational data → eliminated redundancy and streamlined data retrieval for reporting.
- Developed three interactive Power BI dashboards for Orders, Inventory, and Staff, utilizing SQL views (to optimize BI performance) and complex DAX measures.
- Enabled real-time KPI tracking and trend analysis → delivered essential business insight for data-driven management.

## Cloud-Based ELT Pipeline with Snowflake via Fivetran to analyse World Life Expectancy Data [Link]

- Built an automated, scalable ELT pipeline using Fivetran for ingestion into Snowflake Cloud Data Warehouse → ensuring data availability for analysis.
- Performed data cleaning and transformation within Snowflake via SQL to structure the dataset → conducted Exploratory Data Analysis (EDA) to uncover global health and socioeconomic trends.

## **Professional Experience**

#### **Independent Data Analytics Consultant & Immersion**

Oct 2024 - Present

Actively transitioned into data analytics, mastering the full tech stack through dedicated, consultative portfolio
projects focused on translating data into actionable business recommendations

## <u>Drilling Specialist (Data-Driven Operations) | Oil & Gas Upstream</u>

Mar 2009 - Oct 2024

Analyzed high-volume sensor data and engineering models to inform critical, time-sensitive decisions → resulting in
optimized operational efficiency and risk reduction.

- Translated complex operational data (pressure, torque, survey data) into reports and insights that ensured compliance and operational efficiency.
- Managed and streamlined operational data workflows, collaborating with cross-functional teams to ensure safety and data consistency across diverse projects.

## **Education / Courses**

- Google Data Analytics Certificate | Covers the end-to-end data process, from cleaning and analysis using SQL to visualization and business recommendations. [Certificate Link]
- Bachelor of Engineering in Mechanical | Mumbai University, India