Sahil Mahendra Mody

✉ sahilmody749@gmail.com   📞 551-234-7138   in linkedin.com/in/sahil-mody   🔗 https://sahil-1811.github.io/

PROFESSIONAL EXPERIENCE

Kansas Department of Corrections, *Research Analyst*   Dec 2024 – Jun 2025 | Topeka, USA
- Enabled early intervention strategies for high-risk individuals by deploying predictive models (logistic regression, random forest) with over 75% accuracy, empowering case managers to prioritize support and reduce repeat offenses.
- Architected and optimized end-to-end ETL pipelines using industry-standard tools to clean, transform, and load resident data from multiple databases into a centralized data warehouse, improving data accessibility and reducing latency for reporting.
- Enhanced operational oversight for 50+ daily users by delivering interactive Power BI dashboards(leveraging DAX), streamlining report generation time by 60% and enabling proactive monitoring of recidivism trends across key demographics and facilities.

Taylor Farms, *Data Engineer*   Nov 2023 – Nov 2024 | Bellevue, USA
  Project: Fast Data Replication (Phase 2)
- Drafted and operationalized an Azure cloud architecture blueprint for real-time data integration between On-Premise & cloud-based Dynamics 365 F&O; projected to generate an additional $15M annually.
- Developed data warehouse solution on Databricks using Azure cloud services by consolidating multiple data sources including real-time streaming data; it is the foundation for data & AI strategy roadmap.
- Implemented data transformation logic to perform DML operations using change tracking columns and configured a continuous DLT pipeline to automate data processing and synchronization between bronze and silver catalogs.
- Developed and scheduled a job to run every 5 minutes using Apache Spark and SQL to convert 13 traditional stored procedures into Databricks (DBX) format, automating the export of processed data in CSV format to Digital Spaces.
- Collaborated closely with business stakeholders in an Agile (Scrum) environment, identifying business needs to shape functional requirements and drive data solutions that align with business goals.
  Project: Fast Data Replication (Phase 1)
- Designed robust data replication processes for 18 tables containing 2B+ records, from on-premises SQL Server to Azure SQL Server using Azure Synapse Analytics.
- Implemented real-time replication of change tracking data to Azure SQL Server through SSIS pipelines, ensuring continuous synchronization at 5-minute intervals for up-to-date information.
- Constructed an Azure Logic App pipeline to conduct data validation between source and destination tables, facilitating automated email notifications for any identified discrepancies.
- Designed a CI/CD pipeline using GitHub Actions to manage Azure SQL Server across development, testing, and production stages.

VTeamLabs, *Data Analyst*   Aug 2023 – Oct 2023 | Redmond, USA
- Collaborated with team members to craft a fully automated ETL pipeline using Azure Data Factory to extract, transform, and load financial data from multiple sources, ensuring real-time data availability for reporting and analysis.
- Led data cleaning, transformation, and visualization using Power Query, DAX, and Power BI, generating visually appealing reports and dashboards that empowered decision-making and improved user engagement by 15%.

VTeamLabs, *Data Analyst Intern*   Sep 2022 – Dec 2022 | Redmond, USA
- Assisted in the design and maintenance of data warehouse infrastructure, primarily focusing on data integration tasks.
- Created 8 Power BI dashboards for corporate clients to project Return on Investment, monitor accounts growth, new customer trends, and monthly revenue data resulting in 93% customer retention.

Trivia Softwares, *Data Analyst Intern*   Dec 2019 – Feb 2020 | Mumbai, India
- Analyzed 1,000+ students historical data using an Excel spreadsheet, recognized students' academic performance trends and crafted quarterly reports for the 9 instructors getting visibility into cohorts performance.

TECHNICAL SKILLS

Programming Languages: Python, SQL, PySpark, DAX, R Programming, JavaScript (ES6+), HTML, CSS

Azure Cloud Services: Data Bricks, Synapse Analytics, Data Factory, DevOps, Functions, Logic App, EventHub, Stream Analytics

Databases and Tools: Microsoft SQL Server, MySQL, PostgreSQL, MongoDB, Azure SQL Server, SSIS, Excel, Tableau, Power BI, GIT, Power Apps, Postman, Dynamics D365 F&O, JIRA

PUBLICATIONS AND CERTIFICATIONS

- Authored and published a paper on Sentimental Analysis of USA Election Slogans in International Journal of Engineering Research and Applications in (Series-IV) in September 2020, Volume 10, Issue 9, ISSN: 2248-962
- Databricks Certified Data Engineer Associate

EDUCATION

M.S. Computer Science, *Stevens Institute of Technology (CGPA: 3.83/4)*   May 2023 | Hoboken, USA

B.E. Information Technology, *University of Mumbai (CGPA: 3.42/4)*   Jun 2021 | Mumbai, India