Samhita Sree Vishnuvajjula Data Analyst

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Summary

Analytical and results-driven Data Analyst with 3+ years of strong expertise in data cleaning, transformation, and visualization. Skilled in SQL, Python, R, Power BI, Tableau, and cloud-based ETL tools like AWS and Azure. Experienced in working with large, complex datasets to uncover trends, build predictive models, and deliver actionable insights. Adept at collaborating with cross-functional teams in Agile environments. Committed to driving data-informed decisions that improve operational efficiency, customer engagement, and business performance across diverse domains.

Technical Skills

- **Programming & Data Manipulation**: Python (Pandas, NumPy, re, datetime), R (Boxplot Statistical Method), SQL (JOIN, CTE)
- **Data Engineering & ETL**: AWS Glue, AWS Athena, AWS Data Wrangler, Azure Data Factory
- **Data Analysis & Modeling**: Cohort Analysis, Survival Analysis, Anomaly Detection, Churn Prediction
- **Data Validation & Processing**: Data Cleaning, Data Transformation, Quality Checks, Data Flow Logic (Azure)
- **Data Visualization & Reporting**: Power BI (DAX, Filters, Slicers, Drill-throughs, KPI Cards), Tableau (LOD Expressions, Interactive Filters, Trend Views), Excel
- **Tools & Platforms**: Salesforce, Internal CRM Systems, Payer Databases, Jupyter Notebook, Agile Methodologies

Professional Experience

Data Analyst, Prudential Financial 03/2024 – Present | Remote, USA

- Worked on predictive analysis of customer churn for term life and annuity products. Collaborated with product, marketing, and data science teams under Agile methodology with regular requirement gathering to reduce churn risk by 15%.
- Extracted customer interaction and policy data from Salesforce and internal CRM using SQL JOIN and CTE methods. Built ETL pipelines using AWS Glue and processed large datasets via AWS Athena for optimized churn modeling.
- Conducted cohort and survival analysis to uncover churn patterns across customer age groups and tenure. Delivered actionable insights that led to targeted retention campaigns, improving retention rates by 11% in two quarters.
- Utilized Python libraries include Pandas for data manipulation, NumPy for statistical calculations, re for pattern matching, and datetime for time-based segmentation. Processed over 10 million records for churn-related behavior analysis.
- Performed data validation using AWS Data Wrangler and quality rules in AWS Glue. Ensured 97% accuracy in model input data by applying transformation checks and cleaning routines across structured customer records.
- Built Power BI dashboards with filters, slicers, drill-throughs, and KPI cards. Used DAX to create custom measures for churn trends by region and product, enabling leadership to track retention goals in real-time.

Associate Data Analyst, Zelis 01/2021 – 12/2022 | Hyderabad, India

- Analyzed over 1 million healthcare claims to identify cost-saving opportunities by detecting duplicate charges, overbilling, and outlier patterns. Collaborated with finance, compliance, and engineering teams using Agile and regular requirement gathering sessions.
- Extracted structured claims data from healthcare databases and payer systems using complex SQL queries. Performed ETL using Azure Data Factory and improved data processing speed by 30% through index optimization and parallel processing.
- Conducted Anomaly Detection Analysis on historical billing data to detect outliers and reduce erroneous claim payouts. Discovered key anomalies that led to a 12% reduction in excess claim reimbursements in one quarter.
- Used Python with NumPy and Pandas to clean and manipulate 15GB of claims data, generating actionable reports on provider billing behavior and identifying high-cost claim trends across regions and specialties.
- Applied R's Boxplot Statistical Method to visualize and detect claims outliers based on cost distribution. Enabled insights that helped eliminate 3,000+ irregular claims from the payment cycle during the initial rollout.
- Validated datasets through Azure Data Factory pipelines and applied custom logic in data flows. Reduced data inconsistencies by 20% and ensured all claims passed standardized quality checks before further analysis and reporting.
- Designed dynamic Tableau dashboards with interactive filters and time-based trend views. Utilized Level of Detail (LOD) expressions to display average claim costs by provider and region, improving financial visibility for leadership teams.

Education

Florida Atlantic University

Master of Science in Data Science and Analytics 01/2023 – 12/2024 | Boca Raton, USA

Maturi Venkata Subba Rao Engineering College

Bachelor of Engineering in Electronics and Communication Engineering 07/2018 – 06/2022 | Hyderabad, India