Prathyusha Gunreddy

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Detail-oriented professional with a robust background in data collection, ETL processes, and automated reporting. Currently pursuing a Master's in Information Technology & Management, I am passionate about Data Analytics, Data Science, and Business Analysis. Proficient in conducting statistical analysis, and leveraging predictive modeling to drive operational excellence. Demonstrates expertise in data visualization, incident management, metrics definitions, and customer success strategies. Adept at analyzing business processes and requirements to deliver data-driven insights and optimize business outcomes.

RELEVANT COURSEWORK

Software Engineering | Information systems and management | Computer Science | Cryptographic engineering | Web-based business development | Cloud computing | Computational Foundations of AI | Management information assurance security | Theory and implementation of database systems| Artificial Intelligence | Sensor Networks & smart systems.

EDUCATION

Masters Information Technology & Management (Graduation) Aug 2022 - Aug 2024
Florida Atlantic University, Boca Raton, FL GPA 3.02/4.0
Bachelor of Commerce (UnderGraduation) **July 2021**
Osmania University, India GPA 8.9/10.0

EXPERIENCE

Expertise in Data Analysis, Tetra Tech, and Disaster Recovery Unit (Nov 2024- Present)

- Developed advanced call center dashboards and reports using SQL, Power BI, and Looker, enabling actionable trend analysis for healthcare operations.
- Automated recurring reports and built ad hoc analyses to minimize manual effort and improve operational efficiency.
- Produced high-complexity dashboards that supported strategic decision-making across clinical and business teams.
- Conducted root cause analysis on emerging issues and communicated insights through executive presentations and dynamic visualizations.
- Transformed large datasets into meaningful insights by applying predictive modeling and statistical analysis using Python and SQL.
- Proposed and implemented data-driven strategies to optimize customer support functions and reduce operational costs.
- Led process improvement assessments by analyzing performance metrics and identifying areas for automation and enhancement.
- Partnered with cross-functional stakeholders to measure the impact of initiatives and align KPIs with business objectives.
- Managed medium-scale projects in a healthcare and disaster recovery context, delivering scalable analytics solutions under tight deadlines.
- Applied working knowledge of Salesforce CRM data in contact center performance analysis and customer support strategy optimization.
- Demonstrated hands-on experience with Contact Center technologies including Cisco, Ring Central, and Genesys in real-time environments.
- Delivered executive-level reporting and dashboards using Microsoft Excel (Power Pivot, VBA, VLOOKUP) and Power BI.
- Ensured data integrity and governance while handling sensitive healthcare and contact center data in compliance with industry regulations.
- Acted as a liaison between data science, IT, and business units to align reporting solutions with strategic goals.

Data & ML Engineer – U Future Tech. (Jan 2019- Feb 2022)

- Collaborated with cross-functional teams to analyze insurance licensing and renewal workflows, identifying process gaps and recommending automation solutions for compliance efficiency.
- Documented and mapped state-specific licensing requirements (NAIC, NIPR, Sircon) into structured process flows, ensuring system alignment with regulatory mandates.
- Researched and interpreted federal and state insurance compliance regulations, translating them into actionable business requirements for IT and operations teams.
- Acted as liaison between stakeholders and IT teams to define functional specifications for compliance automation and regulatory reporting tools.
- Developed requirement traceability matrices and compliance checklists to ensure smooth adoption of new state and federal insurance standards.
- Conducted data validation and reconciliation for HR, payroll, and financial transactions to maintain accuracy and compliance.
- Conducted impact analysis of regulatory changes on existing insurance workflows and proposed process redesign to mitigate risk and maintain compliance.
- Created and maintained Microsoft Access VBA applications to automate reporting tasks, reducing manual processing time by 40%.
- Built Power Automate flows to streamline data entry, notification, and approval workflows, improving turnaround time for business requests.
- Partnered with cross-functional teams to gather BI requirements, translate them into technical solutions, and ensure timely delivery of dashboards and reports.
- Conducted ad-hoc data analysis to answer urgent business queries, using SQL and Power BI for rapid insight generation.
- Led database optimization initiatives, including indexing and query tuning, to improve reporting performance and data refresh speed.
- Designed SharePoint reporting hubs for centralized access to KPIs, BI documentation, and automated report distributions.
- Collaborated with external vendors to integrate third-party data sources into internal BI platforms, ensuring accuracy and consistency.
- Authored user and technical documentation for BI applications, dashboards, and automated workflows to support training and ongoing maintenance.

TECHNICAL SKILLS

Business Analyst | SQL | Excel (Advanced) | Python or R | Power BI / Tableau | Business Process Modeling (BPMN) | Requirements Gathering Tools | ETL / Data Integration | Agile & Scrum Tools | Microsoft Visio | CRM / ERP Tools | API | Microsoft Power Platforms | Cloud Platforms | Data Warehouse | Application Development | Mobile Development | Process Automation | Software Solutions | Technology Trends | Ux Design | Iot |

SOFT SKILLS

Responsibilities | Problem Solving | Written | Verbal Communication | Resolving Issues | Time Management | Interpersonal | Research |

TOOLS AND TECHNOLOGIES

Languages: Python(Coding) Programming Language(Numpy, Pandas, Matplotlib, Seaborn)

Databases: SQL Queries, Microsoft Office(Microsoft Excel, Microsoft Word, MS Powerpoint), MySQL Server

Visualization Tools: Power Bi, Tableau, MS-Excel(VBA, Vlookup, Xlookup, Macros),Word

Cloud & DevOps: AWS(EC2, Lambda, DynamoDB), GCP (BigQuery), Azure, Docker, Kubernets

Big Data: Spark, Hadoop, Hive, Pig,Sqoop,Oozie

PROJECTS

Healthcare Cost Optimization and Patient Outcome Analysis Using Real-World Claims Data:

• Analyzed payer-provider insurance workflows including claims processing, eligibility verification, and renewals to ensure compliance with state and federal healthcare regulations.

• Partnered with compliance teams to map NAIC/NIPR licensing requirements into healthcare provider credentialing processes, reducing regulatory risks.

• Conducted impact assessments of healthcare insurance regulations (HIPAA, ACA, Medicaid/Medicare) on existing business practices and recommended process improvements.

• Developed compliance dashboards in Power BI to monitor claims approvals, licensing expirations, and provider renewals, enabling proactive risk management.

• Conducted data audits and reconciliation for payroll, accounts payable, and benefits data, ensuring compliance with healthcare regulatory standards (HIPAA, SOX).

• Documented and standardized healthcare insurance compliance procedures, including continuing education requirements and background checks for providers, ensuring audit readiness.

• Partnered with clinical, finance, and IT leaders to translate analytical findings into strategic insights, aligning outcomes with organizational priorities and regulatory frameworks.

Pinellas County, Hurricane Helene Using Excel & PowerBI (Real Time Project): (Nov 2024 – Mar 2025)

• Data Accuracy: Over 5,000 records were streamlined and verified to ensure that they met FEMA requirements for funding eligibility.

• Resource Optimization: By using data analysis to identify high-priority recovery zones, resource allocation was improved by 20%.

• Dashboard Reporting: To improve transparency and decision-making, Power BI dashboards were created to monitor project KPIs.

• Cost Efficiency: By doing cost analysis, reductions that resulted in a 15% reduction in overall project expenses were found.

Health Monitoring and Analysis using Python : (Sep 2023 – Nov 2023)

•Elevated Blood Pressure Prevalence: 40% of the dataset falls under the 'Elevated' and 'Hypertension Stage 1' categories, indicating a need for targeted interventions to manage blood pressure levels in this population.

•Heart Rate Consistency: 90% of individuals have a 'Normal' heart rate, with only 5% showing 'Low' and 5% 'High' heart rates, suggesting that most of the population maintains a stable heart rate within healthy ranges.

•Oxygen Saturation Levels: 95% of patients have 'Normal' oxygen saturation levels, with only 5% showing 'Low' saturation, indicating that oxygen deprivation is not a significant issue for the majority of this population.

Customer Churn Analysis Using SQL & Python: Jan 2024 – Mar 2024

• High Complaint Churn: Customers with over 5 service complaints exhibited a 35% churn rate, more than double the overall churn rate of 18%. Targeted retention campaigns for these customers could reduce churn by up to 20%.

• Subscription Plan Impact: Analysis revealed that customers on the basic subscription plan had a 25% higher churn rate compared to those on premium plans. Upselling to premium plans could decrease churn by 15%.

• Engagement Correlation: Customers with fewer than 3 interactions per month with customer support had a 28% churn rate, indicating that increasing engagement could lower churn by up to 10%.

Sales Performance Dashboard in Power BI May 2024 – Jun 2024

• Top Product Contribution: Identified that the top 10 products contributed to 60% of total revenue, with an average sales growth of 15% month-over-month. Focusing marketing efforts on these products could increase overall revenue by 10%.

• Regional Sales Disparity: Analysis showed that the West region underperformed by 20% compared to other regions, with a declining sales trend. Redirecting resources and sales strategies to this region could boost sales by 12%.

• Customer Segment Profitability: Discovered that premium customers, though only 30% of the customer base, accounted for 55% of total profits. Targeting similar high-value segments could increase profit margins by 8%.

App Reviews Sentiment Analysis Using Machine Learning Jun 2024 – July 2024

• Sentiment Distribution: 60% of the reviews are classified as neutral, 30% as positive, and 10% as negative, indicating that most users are not strongly opinionated about the app.

• Rating and Sentiment Correlation: 80% of 1-star ratings are associated with neutral or negative sentiments, suggesting that low ratings are likely to reflect dissatisfaction or lack of positive experiences.

• Common Themes in Reviews: The most frequent words in positive reviews include "good" and "easy," while negative reviews frequently mention "slow" and "problem," highlighting areas for potential improvement.