

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)

- Comprehensive understanding of various insurance lines of authority and licensing processes including renewal and termination.
- Expertise in navigating regulatory platforms such as NAIC, NIPR, and Sircon for insurance licensing and compliance management.
- Skilled in managing continuing education requirements and conducting state-specific criminal background checks for licensing compliance.
- Experienced in researching, analyzing, and documenting state and federal insurance regulations to assess impact on business operations.
- Proficient in recommending and implementing changes to ensure adherence to evolving regulatory standards and guidelines.
- Maintains up-to-date knowledge of insurance industry regulations, compliance issues, and best practices.
- Strong collaboration skills demonstrated through effective partnership with cross-functional stakeholders to meet compliance objectives.
- Background in business analysis with a focus on compliance laws, regulations, and insurance/risk management processes.
- Proven ability to analyze business requirements and deliver data-driven insights supporting regulatory compliance and operational improvements.

TECHNICAL SKILLS

Business Analyst | Python Code | Core Java | DBMS | SQL Server | Data Governance | Data Warehouse | ETL Tools | ETL Pipelines | Power BI | Data Access Control | Data Structures | Data Integrity | Data Visualization | Data Science | Artificial Intelligence | Machine Learning Algorithms | Deep Learning | Statistical Analysis | Data Pipelines | Business Analysis | Agile | Scrum | Jira | Project Management | Risk Management | Git |

SOFT SKILLS

Strategic Initiatives | Strategic Planning | Team Performance | Technical Solutions | Responsible | Technical Leadership | NInfluence | Package Management | Self Management | Credentialing | Publish | Stem | Discipline | Technical Writing |

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, Kubernetes

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

PROJECTS

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

- Analyzed real-world healthcare claims data to identify cost optimization opportunities while ensuring compliance with state and federal regulations.
- Developed and automated ETL pipelines to process large datasets, supporting regulatory reporting and operational decision-making.
- Created interactive dashboards and reports to monitor key healthcare metrics, enabling data-driven compliance and business process improvements.
- Conducted research and documentation on healthcare regulations to assess potential impacts on data handling and business practices.
- Collaborated with cross-functional teams to align analytics solutions with compliance requirements and licensing standards.
- Applied statistical and predictive modeling techniques to improve patient outcomes while adhering to industry standards and regulations.
- Ensured data governance and maintained data integrity in compliance with healthcare laws 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.