

SANTHOSH PALLEPANGI

+1 (937) 580 5198 | palle.santhoshk@gmail.com | [Linkedin](#)

SUMMARY

Senior Data Analyst with 4+ years of experience in SQL, Python, Tableau, and statistical modeling, specializing in data-driven decision-making and process optimization. Proficient in designing data warehouses, ETL pipelines, and automated dashboards. Skilled in A/B testing, predictive analytics, and machine learning to deliver actionable insights. Proven track record of improving operational efficiency and driving business outcomes through data-driven solutions.

SKILLS

Programming: SQL, Python (NumPy, Pandas, Matplotlib, Scikit-learn, Seaborn), SAS, R (dplyr, Tidyverse, ggplot2)

Tools & Cloud Platforms: Tableau, Power BI, AWS, GCP, Databricks, Jupyter Notebook, Excel, Git, JIRA, Confluence

Database Management & Analytics: Data Warehousing, Dimensional Modeling, ETL Processes, Data Visualization

Statistical Methods: Descriptive Statistics, A/B Testing, Regression, Forecasting, Predictive Analytics

WORK EXPERIENCE

State of Missouri, Missouri, US

Department of Corrections

Dec 2024 - Present

Data/Research Analyst III

- Developed automated dashboards using SQL, Tableau, and Python to track inmate rehabilitation outcomes and facility performance metrics, enabling real-time decision-making and improving operational efficiency by 25%.
- Designed and implemented A/B testing frameworks to evaluate the effectiveness of different rehabilitation programs and intervention strategies for incarcerated individuals, resulting in a 15% improvement in program outcomes.
- Enhanced offender classification system accuracy by 18% by training and validating a k-means clustering model on inmate profiles, aiding in facility placement and resource planning
- Identified key predictors of inmate misconduct by conducting feature importance analysis on supervised learning models (XGBoost and Decision Trees), resulting in enhanced classification of high-risk individuals and informing facility staffing policies

Department of Higher Education and Workforce Development

Oct 2023 – June 2024

Data/Research Analyst

- Developed statistical models, including regression analysis and machine learning, which identified key workforce trends and influenced **\$10M** in funding allocations.
- Managed the development of ETL pipelines using PySpark and SQL to automate data integration from multiple sources into a centralized data warehouse, reducing manual data processing time by 30% and improving data accuracy.
- Developed data visualizations and dashboards to compare performance metrics across 200+ Graduate programs and initiatives, enabling leadership to identify disparities, optimize resource allocation, and improve operational outcomes by 20%
- Presented data-driven insights to 100+ stakeholders at high-profile industry events and internal meetings, resulting in actionable strategies that addressed critical business challenges and improved decision-making processes
- Designed and implemented relational databases to store and manage workforce development data from 15+ educational institutions, improving data accessibility and reducing query response times by 40%.

Y Point Analytics, Hyderabad, India

May 2018 – July 2021

Data Analyst

- Designed and implemented Oracle-based data warehouses to consolidate data from multiple sources for a pharmaceutical client, enabling real-time reporting and improving operational efficiency by 25%
- Built and optimized data pipelines using Databricks to process and analyze large datasets for a retail client's supply chain operations, reducing data processing time by 50% and enabling faster insights into inventory and logistics performance.
- Led a team of 10 to migrate 1,000+ ETL jobs to an upgraded platform increasing data processing speed by 50%.
- Collaborated with data engineering teams to optimize Databricks clusters for a financial services client, ensuring efficient processing of large datasets, resulting in a 40% improvement in data processing speed and cost savings.
- Conducted A/B tests on customer-facing dashboards to determine which metrics and visualizations drove better user engagement, leading to a 20% increase in adoption of new reporting features.

EDUCATION

University of Missouri, Columbia, MO

May 2023

Master of Science in Data Science and Analytics

National Institute of Technology, Calicut, India

May 2018

Bachelor of Technology in Computer Science and Engineering