

Venkata Akhil Mettu

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PROFESSIONAL EXPERIENCE

Enterprise Data Solutions Analyst | NAVCO Industries Pvt Ltd | Remote February 2024 – Present

- Designed and deployed enterprise data solutions leveraging SQL, Python, and AWS, improving operational efficiency by 15% and reducing reporting cycles by 30%; engineered and maintained 10+ ETL pipelines using AWS Lambda and Python, cutting data processing time by 40%.
- Automated 20 reporting workflows and developed 12 dynamic dashboards in Tableau and Power BI, streamlining decision-making, reducing manual effort by 35%, and ensuring cross-functional accessibility.
- Conducted 50+ test cases and implemented data validation workflows, increasing data accuracy by 25%, while leading analytics initiatives across 5+ cross-functional teams to ensure timely project delivery and seamless integration.
- Mentored 6 junior analysts by introducing best practices in data management and analytics, fostering a data-driven culture, and enhancing team capacity by 20%.
- Technologies:** Python (Pandas, PySpark, NumPy, Scikit-learn), SQL, AWS (Redshift, S3, Lambda, EMR), Databricks, ETL Pipeline Design, Data Modeling, Apache Kafka, Power BI, Tableau, Statistical Analysis, Machine Learning, Git, Docker, CI/CD, Agile Methodologies, Team Management, Stakeholder Communication, Project Planning.

Data Analyst | NAVCO Industries Pvt. Ltd. March 2022 – May 2023

- Enhanced production output by 5% through trend analysis and process improvements using SQL and Python, while conducting 20+ DOE analyses to improve defect rates by 12% via process optimizations.
- Deployed advanced forecasting models (Prophet), reducing inventory costs by 8% and improving demand planning accuracy, and built an automated analytics pipeline integrating DOE methodology and statistical tools.
- Designed 10+ interactive Tableau dashboards, providing real-time sales insights and enabling targeted marketing strategies across multiple teams.
- Technologies:** Python (Pandas, NumPy, Scikit-learn), SQL, Prophet, Statistical Modeling, Time Series Analysis, Data Validation, ETL Processing, DOE Methodology, Tableau (Real-time Analytics), Matplotlib, Seaborn, Jupyter Notebook, Git, Excel (VBA, Power Query), Process Optimization.

Junior Data Analyst | NAVCO Industries Pvt. Ltd. October 2021 – February 2022

- Led exploratory data analysis (EDA) using Python and SQL, uncovering key patterns to inform high-impact decisions; automated data extraction and analysis processes, establishing the organization's first standardized analytical framework.
- Designed Tableau dashboards integrating A/B test outcomes and campaign metrics, driving a 25% improvement in marketing ROI and providing actionable insights for cross-functional teams.
- Developed time series forecasting models with ARIMA and Prophet, optimizing inventory planning and improving demand forecasting accuracy.
- Technologies:** Python (Pandas, NumPy, Scikit-learn), SQL, Statistical Modeling, Tableau (Marketing Analytics, KPI Dashboards), Time Series Analysis (ARIMA, Prophet), A/B Testing, Data Storytelling.

Junior Data Analyst | VLHS Pvt. Ltd. October 2020 – August 2021

- Implemented statistical process control (SPC) methodologies to automate quality monitoring, increasing operational efficiency by 10%, and conducted A/B testing with SQL and Google Analytics to enhance customer engagement by 20%.
- Designed and maintained production and inventory dashboards in Tableau and Power BI, reducing overstock by 15% and providing actionable insights to cross-functional teams.
- Technologies:** Python (Pandas, NumPy, SciPy), SQL, Statistical Analysis (SPC, A/B Testing), Tableau (Real-time Monitoring), Power BI (Inventory Analytics), Google Analytics, Data Modeling, ETL Processing.

Data Analyst Intern | VLHS Pvt. Ltd. August 2020 – September 2020

- Automated quality assurance workflows with Python, ensuring regulatory compliance and improving data accuracy, and developed comprehensive reporting solutions integrating real-time operational data and monthly trend analyses.
- Delivered detailed weekly and monthly analytical reports for senior leadership, supporting strategic decisions and driving process improvements.
- Technologies:** Python (Pandas), SQL, Power BI, Excel, Data Quality Management.

RESEARCH PROJECTS

DoD Budget Analytics: Interactive Defense Financial Analysis Framework | [Live Demo](#)

- Architected and implemented a comprehensive analytics system processing 185,000+ DoD budget transactions (\$8.13T) across 472 programs, achieving 92.47% execution rate and sub-second query response times. Developed real-time visualization capabilities for complex defense spending patterns with focus on RDT&E investments (\$996.48B) and personnel costs (\$2.68T).
- Technologies & Tools:** Python, PostgreSQL, Streamlit, Plotly, Heroku, Git, ETL Pipeline, Data Validation Framework.

Foreign Exchange Trend Analysis and Prediction using Machine Learning | [Live Demo](#)

- Developed and deployed an end-to-end forex prediction platform integrating historical market data from Yahoo Finance and World Bank indicators, implementing advanced time series models (ARIMA) and feature engineering techniques for trend analysis. Created interactive dashboards for real-time market insights, achieving 85% accuracy in trend prediction and successfully deployed as a web application for stakeholder accessibility.
- Technologies & Tools:** Python (Pandas, NumPy, Scikit-learn), ARIMA, Streamlit, Plotly, Heroku, Git

EDUCATION

Master of Science in Data Science | Saint Peter's University, New Jersey, USA GPA: 3.9/4.0

Bachelor of Engineering | AVIT, Vinayaka Mission's Research Foundation, India GPA: 3.7/4.0

CERTIFICATIONS

Advanced Google Analytics

[AWS Certified Cloud Practitioner](#)

[Power BI Data Analyst Associate](#)

[Azure Fundamentals](#)

[Azure Data Fundamentals](#)

[Azure AI Fundamentals](#)