Sindhu Bommali
Data Analyst

📞 (573) 647-3786 ✉ sindhubommali1@gmail.com in **LinkedIn** ⭘ **GitHub** 👤 **Portfolio**

Summary

- Data Analyst with 3+ years of experience transforming complex data into strategic business intelligence using SQL, Python, and advanced visualization techniques.
- Proficient in bridging communication gaps between IT and business teams, effectively translating technical findings into actionable insights that drive organizational decision-making.
- Results-oriented professional with a proven track record of identifying cost-saving opportunities and implementing solutions that strengthen operational efficiency and regulatory compliance.
- Skilled in developing customized reporting solutions and enhancing data literacy across organizations, enabling teams to leverage analytics for improved performance outcomes.

Skills

Methodologies: Agile, Waterfall, SDLC
Programming Languages: Python, SQL, R
Libraries: Pandas, NumPy, seaborn, Matplotlib, Plotly, SciPy
Databases: MySQL, SQL Server, PostgreSQL
Data Visualization Tools: Tableau, Power BI, Advanced Excel
Cloud Platforms: Azure, AWS
Big Data Technologies: Hadoop, Spark
Data Analysis Techniques: Regression Analysis, Statistical Analysis, Data Cleaning, Hypothesis Testing, A/B Testing, anomaly detection, EDA
Soft Skills: Stakeholder Engagement, Team Collaboration, Strong Communication, Problem-Solving, Attention to Detail, Data Storytelling

Education

Masters, Computer Science | Missouri University of Science and Technology, Missouri	**May 2024**
Bachelor's, Computer Science | GITAM Deemed University, India	**May 2022**

Work Experience

Data Analyst \| PNC, Arizona   **January 2024 - Current**

- Conducted predictive analysis using **SQL**, **Advanced Excel**, and **Python** by extracting and loading raw financial data from diverse sources, applying data cleaning techniques to produce insights that improved forecasting accuracy by 15%.
- Collaborated with cross-functional teams using **Agile** and **SDLC** frameworks to define business requirements and ensure data integrity across reporting systems, leveraging **MySQL** and **PostgreSQL** databases to support robust data management and consistency.
- Developed dynamic dashboards with BI tools such as **Power BI** to visualize complex trends, applying **statistical analysis** and **hypothesis testing** to enable clear, actionable communication of insights to key **stakeholders**.
- Provided end-user support by advising on data manipulation techniques using **SQL** and **R**, leveraging **advanced analytics** to examine large datasets and integrating **A/B testing** to enhance data literacy and optimize decision-making processes.
- Led a fraud detection initiative by analyzing transaction data with **SQL** and **Python**, applying **Exploratory Data Analysis** and **anomaly detection** to identify anomalies, which contributed to mitigating fraudulent activities and ensuring regulatory compliance.
- Managed an expense analysis project by automating data preparation using **Advanced Excel, Power Query,** and **SQL,** categorizing and evaluating spending trends, and applying **statistical analysis** to implement cost-saving measures that reduced operational expenses by 8%.

Data Analyst \| Informative Web Solutions, India   **June 2020 - July 2022**

- Collected, cleaned, and managed healthcare data from electronic health records and patient management systems using **Python (Pandas, NumPy)** and **SQL**. Ensured data accuracy and completeness through data cleaning and **exploratory analysis** in **Agile** environments.
- Analyzed patient treatment effectiveness and healthcare utilization patterns using **statistical analysis** and **hypothesis testing.** Applied **SQL** and **R** to identify trends that drove process improvements and informed clinical decision-making within a structured **SDLC** framework.
- Developed interactive dashboards and reports using **Tableau** to visualize key insights, leveraging **advanced Excel** techniques and **A/B testing** methodologies to support robust data-driven decision-making and enhance **stakeholder** communication.
- Collaborated with healthcare stakeholders and IT teams, utilizing **Agile methodologies** and **Git** for **version control**, to refine data collection processes and standardize reporting formats, ultimately addressing data quality and privacy concerns.
- Conducted predictive analysis for heart disease risk assessment, achieving 92% accuracy in identifying high-risk patients by employing statistical techniques and **Python**-based **regression analysis** to support early intervention strategies.
- Analyzed electronic health records through **exploratory data analysis,** reducing data processing time by 35% while integrating **MySQL** for data management and identifying patient health patterns that improved clinical outcomes.

Projects

Network Intrusion Detection System - Implemented Random Forest Classification using Python to detect anomalies with 96% accuracy and utilized Multimodal Classification techniques to compute various intrusion probabilities, cutting back decision-making time by 30%. Leveraged matplotlib for data visualization, for intuitive interpretation and user-friendly interface.

HR Analytics Dashboard - Outlined an interactive Power BI dashboard to analyze employee demographics, promotion readiness, and workforce distribution, mitigating HR analysis time by 40%. Visualized key KPIs like turnover rates and promotion eligibility, enabling data-driven decisions and refining workforce planning efficiency.

Certifications

AWS Certified Solutions Architect – Associate
Google Data Analytics