Manaswini Chittepu

manaswini.chittepu4@gmail.com | LinkedIn | (660)-528-1633

Professional Summary

Skilled in developing sophisticated data pipelines and crafting visualizations using Power BI and Tableau. Proven expertise in extracting, transforming, and analyzing complex datasets to deliver actionable insights that drive strategic decision-making for stakeholders.

Work Experience

Optum(UnitedHealth Group)

Aug 2023-Aug 2024

Technology Development Programmer-II

- Developed an end-to-end data pipeline integrating Oracle, Kafka, Azure AKS, and Snowflake to facilitate real-time data processing and reporting, resulting in a 25% increase in data accessibility and operational efficiency across teams.
- Utilized **Oracle** and **Kafka** for CDC to streamline data flow into the public cloud. Implemented **Apache Beam** for data processing, significantly enhancing the system's scalability and robustness, reducing processing time by **20%**.
- Leveraged **Azure AKS** for orchestrating containerized applications, ensuring seamless integration with Snowflake for data warehousing. Designed Snowflake schemas (Raw, Silver, Gold) to improve data quality and readiness for analytics, leading to a **40%** increase in reporting efficiency.
- Utilized **Power BI** to create dynamic dashboards and reports, driving a **35%** improvement in data-driven decision-making. Enabled stakeholders to access real-time insights and reports, significantly enhancing business intelligence capabilities.
- Spearheaded efforts to reduce errors and enhance pipeline reliability by 15% through effective database navigation and SQL optimization, ensuring high data integrity and operational continuity.

Plotmydata Sep 2021 - Dec 2021

Data Analyst Intern

- Analyzed multi-channel marketing data using advanced analytic techniques, resulting in a 20% increase in ROI. Implemented precise ad targeting strategies, achieving significant improvements in conversion rates.
- Partnered with cross-functional teams to identify data-driven opportunities, increasing revenue by 15% through optimized product development and targeted marketing strategies.
- Derived KPIs, metrics, and actionable insights from raw data using SQL, contributing to a 15% boost in operational efficiency.
- Presented insights and recommendations to clients, demonstrating the ability to communicate complex findings effectively.
- Spearheaded initiatives to enhance operational workflows by implementing Quality Control Checks and refining data processing measures, resulting in a 40% improvement in productivity while upholding data integrity standards.
- Revamped automation projects using **Python and R** reducing manual workload by 75% and expediting processes to improve operational efficiency and minimize errors.
- Provided analytical support for strategic planning and decision-making, contributing to the team's corporate direction.
- Developed operational reports and interactive **Tableau** dashboards, enabling stakeholders to make informed, data-driven decisions.

Education

University at Buffalo, The State University of New York

Aug 2024 - June 2026

Masters in Data science **Amrita Vishwa Vidyapeetham**

Aug 2019 - May 2023

Bachelors in Electronics and Communications

Projects

Credit Card Fraud Detection | Python (Pandas, NumPy, Matplotlib, ggplot, Scikit-learn)

- Analyzed and preprocessed credit card transaction data to identify patterns indicative of fraudulent activity. Constructed and evaluated machine learning models (Logistic Regression, Random Forest, Gradient Boost) using Scikit-learn to distinguish fraudulent transactions with high accuracy, addressing class imbalance with Imbalanced-learn techniques.
- Optimized model performance by employing precision, recall, and F1-score metrics, ensuring a robust and efficient system for real-world financial fraud detection.

$Chicago\ Crime\ Analysis\ and\ Forecasting\ |\ Python\ (Pandas,\ NumPy,\ Seaborn),\ SQLite,\ Power\ BI$

- Executed data preprocessing and normalization of a 1.04M record dataset using SQLite within Python. Unearthed intricate trends, including seasonality & hourly patterns, through comprehensive exploratory analysis. Employed **Folium** library for geographical analysis and forecasted crime trends using **SARIMA** and **Prophet** (ML Algo), confirming Chicago's increasing safety over time.
- Engineered a visually compelling **Power BI** dashboard, translating intricate analysis into an intuitive user interface.

Enhancing Hospital Efficiency using ML and Predictive Modelling | Python (Pandas, NumPy, Matplotlib, Scikit-learn)

- Optimized Length of Stay (LOS) predictions using the **XG Boost** algorithm, reducing patient LOS by **15%**, leading to significant improvements in bed availability and resource allocation.
- Implemented robust data cleaning and preprocessing techniques on large healthcare datasets, ensuring high data quality and accuracy for predictive modeling efforts. Developed and deployed a predictive model to forecast patient outcomes, contributing to a 20% reduction in infection rates and enhancing overall hospital efficiency and patient care quality.

Skills

- Technical Skills: SQL, Python, C,SAS, SSIS, R, Tableau, Power BI, Snowflake, Microsoft Azure, Google Cloud, Agile Methodology, Excel, Insight Generation, TensorFlow, PyTorch, Scikit-learn, Keras, Statistical Methods, CRM, MongoDB, Apache Spark, Hadoop
- Soft Skills: Communication, Leadership, Problem-Solving, Teamwork, Creativity, Business Strategy

Certifications

Google Data Analytics Professional Certificate Microsoft Azure Data Scientist Associate Microsoft Azure Data Engineer Associate