SHASHANK REDDY MANDA

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Summary: Data Science professional with 2 years' experience and a Master's in Industrial Engineering. Expert in Python, R, SQL, and data visualization tools. Skilled in ML, NLP, data mining, and ETL processes. Proven track record in developing actionable insights, optimizing data quality, and collaborating cross-functionally. Proficient in cloud platforms (GCP, Azure) and database management. Passionate about leveraging data-driven strategies for business improvement.

Education:

Purdue University, West Lafayette, IN, US. Jan 2022 to Dec 2023

Master's (MS) in Industrial Engineering, CGPA: 3.78/4

Coursework: Data Mining, Data Engineering, Web Data Analytics, ML, Unstructured Data, NLP, and AI-Assisted Big Data.

Skills:

Technical skills: Python, R, SAS EM, SAP BO, SQL, Matlab, NoSQL, GCP, REST APIs, Databricks, Azure ML
Tools: Qlik Sense, Tableau, Power BI, Looker Data Studio, BigQuery ML, MLflow, MS Office Suite, JIRA, Vrep, Solidworks
IDEs/Database: Jupyter Notebook, Google Colab, MySQL, PyCharm, Visual Studio Code, MongoDB, RStudio

Professional Experience:

Purdue University, West Lafayette, IN Aug 2023 to Dec 2023

Graduate Teaching Assistant, School of Industrial Engineering

- Led and managed a class of **175 students** for the IE 474 Industrial Control Systems, ensuring high levels of student satisfaction and engagement while guiding coursework, conducting exams, and developing course materials.

Cook Research Incorporated, West Lafayette, IN Jan 2023 to Aug 2023

Quality Systems Data Analyst

- Implemented Lean methodologies to drive a **50% increase** in system utilization. Utilized **PLM** and **Infor** systems for impact analysis, process development, and optimization, resulting in heightened efficiency, data quality, and compliance.
- Achieved a remarkable **90% reduction** in reporting time by employing advanced data analysis techniques within **SAP Business Objects**, encompassing data extraction, transformation, and visualization functionalities of the **ERP** system.
- Facilitated **cross-functional team collaboration** to achieve fully satisfying stakeholder outcomes. Developed dynamic, real-time dashboards in **Qlik**, employing **SQL** for efficient data **ELT** processes, fostering **continuous improvement**.

Wabash National, West Lafayette, IN May 2022 to Jan 2023

Data Analyst

- Achieved a **28% improvement in trailer utilization** through **data pipelines**. Leveraged **DASK** for parallel computing.
- Conducted comprehensive statistical data analysis on telemetry data from various sensors, leading to actionable insights.
- Engineered a **Python** program to visualize telemetry sensor data, resulting in comprehensive and complex **dashboards**.

Tesla, West Lafayette, IN Aug 2022 to Dec 2022

Data Science Researcher

- Spearheaded Tesla's **NLP** and **ML** initiative utilizing **TensorFlow** and **scikit-learn** for open-text **data classification**.
- Led development of an ML model, significantly improving **predictive maintenance** by categorizing open-text data. This streamlined grouping of maintenance and downtime events, enhanced operational effectiveness at Giga Factory, Nevada.

Project Experience:

ML-Driven Craigslist Classification Oct 2023 to Dec 2023

- Leveraged **Selenium** for efficient **web scraping** on Craigslist, employed NLP techniques for precise **sentiment analysis**, and attained an **81.50% accuracy** with **XGBoost**, demonstrating advanced analytical and machine learning proficiency.

Electricity Consumption Analysis Aug 2022 to Dec 2022

- Applied **Python** and **R** for data analysis on electricity consumption patterns, implementing ML algorithms for **clustering** to optimize power distribution strategies and achieve an **84% accuracy** in predicting future use.
- Successfully implemented **soft-dynamic time wrapping**, achieving high accuracy in cluster identification.

Firm Bankruptcy Prediction Aug 2022 to Oct 2022

- Developed a predictive model to combine various econometric measures and foresee a firm's financial condition.
- Achieved an **ROC** of 0.971 using **Neural Networks**, **Gradient Boosting**, **Decision Trees**, **Random Forests**, and other data transformations and preprocessing techniques in **SAS EM** by taking 64 attributes to predict and classify as default.

Database Integration and Management with Python May 2021 to Aug 2021

- Executed database queries on a large dataset, optimizing performance and achieving a **95% accuracy** rate in data retrieval demonstrating expertise in data management, **SQL**, **database optimization**, and visualizing real-world data.