Meghana Bollepalli

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Education

University at Buffalo, The State University of New York   **Buffalo, NY**
MS Engineering Science, with a focus on Data Science   Jan 2022 – May 2023
Stanley College of Engineering   **Hyderabad, India**
Bachelor of Engineering in Computer Science and Engineering   Aug 2016 – Sept 2020

Technical Skills

Languages: Python, R, HTML, MATLAB, SQL.
Big Data: Hadoop HDFS, Apache Spark, Informatica PowerCenter.
Database: MySQL, SQLite, PostgreSQL, MongoDB, Big Query, HiveQL, SparkSQL.
Cloud Platform: Google Cloud Platform (GCP), Microsoft Azure, Amazon Web Services (AWS).
Data Visualization: Microsoft Power BI, Tableau, EDA, Google Looker Studio, Google Analytics 4, QlikView.
Machine Learning: NTLK, Pandas, TensorFlow, Matplotlib, Keras, PyTorch, SciKit-Learn, Spark NLP, ETL.

Tools: Jupyter Notebook, Visual Studio Code, RStudio, GitHub, Microsoft Office Suite, Azure Databricks, Atlassian JIRA.

Experience

Rean Foundation   **Lessburg, VA**
Data Analyst   Aug 2023 – Present
- Actively involved in designing A/B tests, defining metrics to validate new user interface features, calculating sample size and checking statistical assumptions for tests.
- Utilized a combination of data sources, including customer feedback, weather patterns, and geographical data, to enhance outage prediction accuracy and streamline outage management processes for a large customer base of over 4.8 million.
- Applied advanced data analysis techniques using Python libraries such as Pandas, NumPy, seaborn, SciPy, and Matplotlib, along with Scikit-learn, to develop and implement machine learning algorithms.
- Collaborated with cross-functional teams to implement innovative data-driven solutions, leveraging state-of-the-art technologies and methodologies, to optimize business processes and drive strategic decision-making.
- Employed various machine learning models, including linear regression, multivariate regression, naive Bayes, Random Forests, K-means, and KNN, to derive insights and drive data-driven decision-making processes.

MAA TVS   **Hyderabad, India**
Associate Analyst   May 2019 – Nov 2021
- Implemented rigorous data cleaning and preprocessing techniques to maintain data integrity and quality. Developed automated processes to identify and address inconsistencies, outliers, and missing values, ensuring robust analysis outcomes.
- Demonstrated expertise in Data Analytics, Data Visualization, and Natural Language Processing to tackle complex challenges and drive organizational success.
- Executed custom cuts for gap analysis, facilitating comparative assessments between clients, world-class benchmarks, and competitor companies to drive performance improvements.
- Managed Stakeholder Surveys, analyzing respondent data to extract actionable insights and support strategic planning initiatives.
- Crafted visually compelling data reporting dashboards utilizing Excel and Tableau, incorporating pivot tables and VLOOKUP functions to present complex information in a clear and accessible format.

Projects

Breast Cancer Diagnosis
- Estimated if a breast cell is malignant based on features extracted from digital photographs of cells.
- Executed SMOTE, Bagging, Random Forest algorithms to construct a predictive model of breast cancer diagnosis accuracy.
- Expertly recognized and selected bagging as the most optimal model for conducting insightful breast cancer analysis.

Data Scientist Salary Prediction
- Diligently performed comprehensive analysis to meticulously identify and project critical technology trends within the ever-evolving data science sector.
- Visualized past salary data to identify patterns and develop predictive models, reducing variance of predictions by 40%.
- Performed linear, lasso, ridge regressions to get accuracy of model to predict average salary.

Book Recommendation System
- Forged a robust recommendation system for 271,360 books and 278,000 users, amplifying user experience and engagement.
- Implemented content-based and collaborative filtering techniques to provide personalized book recommendations based on user preferences and book characteristics.
- Utilized data preprocessing techniques, such as feature selection and Gower distance method, to enhance accuracy of recommendation system and improve relevance of suggested books.