MANUSHA VEMULAPALLI

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PROFESSIONAL SUMMARY

Enthusiastic and self-motivated individual with a strong passion for Data Science and analytics, coupled with robust analytical skills and adept problem-solving abilities. Leveraging a four-year track record of academic research in Data Analytics, I possess a comprehensive understanding of gathering and processing structured and unstructured data from diverse primary and secondary sources. My capabilities extend to the domain of machine learning where I skillfully design prediction models, statistical frameworks, and recommendation systems. Building data visualizations and multi-faceted dashboards using Tableau & PowerBI communicating key performance indicators, metrics, significant trends, and interrelationship across diverse datasets. With a knack for clear communication, I specialize in succinctly presenting intricate insights to organizations and stakeholders, aiding informed decision-making and storytelling through data. My aspirations drive me to seek opportunities where I can channel my knowledge, skills, and experience to make a tangible contribution to achieving company objectives.

SKILLS

- ***Programming Languages:*** Python, R.
- ***Databases:*** SQL, SQL Server, MS Azure.
- ***Data Visualization Tools:*** Tableau, Microsoft Excel, Power BI.
- ***Machine Learning*** – Classification Models, Regression Models, Dimensionality Reduction Techniques, Neural Network Models, Forecasting, Text Mining.
- ***Frameworks:*** Apache Hadoop, Spark, GCP.
- ***Libraries:*** NumPy, SciPy, Matplotlib, Seaborn, Pandas, Keras, OpenCV, Scikit-learn, PyTorch.
- ***Data Wrangling:*** Alteryx.
- ***Documentation:*** MS Suite, Google Suite, SSRS, SSIS.
- ***IDE:*** PyCharm, Spyder, Jupyter Notebook.
- ***Scripting Languages:*** HTML, CSS, JavaScript.
- ***API's:*** Postman

WORK HISTORY

Graduate Research & Teaching Assistant, January 2022 to May 2023
New Mexico State University – Las Cruces, NM

- Gathered data from different sources for advanced analysis and advanced data research, various data mining techniques to improve the quality of data to answer complex questions using ETL tools.
- Market research focusing on generating competitor analysis profiles for a better view of the market and what it takes to beat the competition.

- Implementing Machine Learning models by building prediction models and recommendation systems.
- Conduct analysis to find significant insights and trends to predict customer behavior.

Worked as Lab instructor and grader for Python Programming (CS 452).
Worked as Lab instructor and grader for Principles of Computer Science (CS 111).

Graduate Assistant, January 2021 to July 2022
New Mexico State University – Las Cruces, NM

- Led data management efforts, ingesting, and transforming diverse datasets to ensure data quality and accuracy.
- Utilized MS Excel at a master level to perform complex data analysis and reporting tasks, improving data accuracy and efficiency.
- Leveraged basic programming skills in Python and R to enhance data analysis capabilities, leading to more accurate prediction.
- Performed a demographic data analysis, based on university's population, and generated reports. Applied data visualization through different formats such as graphs, tables, and PowerPoint slides.

Intern, January 2020 to December 2020
Tata AIA Life Insurance – Hyderabad, India.

- Collaborated with cross-functional teams to conduct A/B tests analyzing results to provide recommendations for enhancing user experience.
- Successfully analyzed large datasets, generating comprehensive reports that guided strategic decision-making.
- Created impactful data visualizations using Tableau and ggplot2, enabling non-technical stake holders to comprehend complex information.
- Closely observed the marketing strategies in promoting the new insurance policies as covid hit the world and detailed analysis on past insurance policies and how machine learning would help for new age insurance policies.
- Involved in writing a detailed report on how the market was before and after covid. Planning different survey strategies to make a new policy as the conditions were changed after covid.

EDUCATION

Master of Science - Industrial Engineering, Minor in Computer Science, May 2023.
New Mexico State University - Las Cruces, New Mexico.

Bachelor of Technology - Computer Science, May 2020.
Jawaharlal Nehru Technological University – Kakinada, India.

PROJECTS

Classification of Machine Learning Methods using Breast Cancer Diagnosis: The aim of the project is to predict if a person is affected with Breast cancer. The methodology is to ensure analyzing the data and extracting key characteristics of relationships and information from a dataset. two of the most popular machine learning techniques have been used for classification of Wisconsin Breast

Cancer (Original) dataset and the classification performance of these techniques have been compared with each other using the values of accuracy, precision, recall and ROC Area.

Marketing Analytics to find better strategy: Data set was collected from Kaggle. After accessing the data cleaning was performed to look at feature information clearing missing values, irrelevant data and formatting was completed then EDA was applied to find the outliers and variables that doesn't affect the target variables and anomalies were detected. Next Statistical analysis was used to find the customers bought more products and which products and what factors lead to more sales for the store. People who bought online shop less and people who come to store tends to buy more products and determined the consecutive sales of customers and frequency of visiting to the store was found which helps what is attractive factor for the customers. Data visualization has been done for further analysis. After finding all the insights from the above analysis we can now visually tell what we can do to improve the sales and come up with better marketing campaigns.

Clustering based Project: Data analysts use clustering to develop unsupervised learning algorithms that group data points with similar properties together. If you're working with a large data set, this can help you identify commonalities quickly by creating categories. You could use this concept to cluster social media posts by topic, songs by genre or grocery store items by product type. Choose an area to focus on to get started. Then begin collecting data and create a broad list of categories relevant to your project. Finally, develop an unsupervised learning algorithm to analyze each data point and determine how to categorize it.