YASWANTH PATI

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EDUCATION

Saint Peter's universityJersey City, NJM.S in Data Science, GPA: 3.97/4.0Expected Feb 2025

Sree Vidyanikethan Engineering College

B. Tech in Mechanical Engineering, GPA: 8.63/10.0

Tirupati, India Jul 2016 - May 2020

PROFESSIONAL EXPERIENCE

Infosys Limited Hyderabad, India
Data Analyst Jan 2021 - July 2022

- Extracted data, cleaned, and analyzed it using Python and SQL to provide perceptions that could help drive business decisions.
- Streamlined and managed data pipelines to enable frictionless integration of web platforms with structured and unstructured data sources.
- Created a Web-based dashboards integrated with SQL databases and data visualization tools, such as Tableau and Power BI, are led to engage the audience with continuous analysis.
- Crafted a responsive and friendly user interface of Web, with HTML5, CSS, and TypeScript. Keeping cross-browser compatibility in mind.
- Worked within cross-functional teams to deliver efficient data-powered web solutions, using Agile methodologies and Git version control.

TECHNICAL SKILLS

- Programming Languages: Python (NumPy, Pandas, Scikit-learn, Matplotlib), R.
- Machine Learning: Supervised and Unsupervised Learning, Natural Language Processing, Regression analysis, Classification, Clustering,
 Feature selection, Ensemble methods.
- Data Analysis Tools: Tableau, Power Bi, Apache Spark, Excel, Azure.
- Tools: Excel, Git, Angular framework, Node.js, Juypter notebook, GitHub.
- Database Management Systems: MySQL, PostgreSQL.

NOTABLE PROJECTS

Route Planning for sensitive populations

Nov 2024

- Designed an eco-friendly route optimization web application using the Angular framework, embedding real-time weather and air quality feeds from Azure Maps API to enable users to minimize exposure to pollution.
- Visualize dynamically generated routes with extensive environmental information, such as air quality indices, dominant pollutants, and weather conditions, via interactive map tooltips.
- Speech recognition is integrated to enable users to input start and end points with their voice commands more accessible and user-friendly.

Wildfire prediction using machine learning

Nov 2024

- Utilized MODIS and VIIRS satellite data to classify wildfire intensity (low, medium, high) and predict detection confidence using machine learning models.
- Achieved high accuracy in intensity classification using a Random Forest Classifier, with results validated through cross-validation.
 Developed a Confidence Level Classification Model, achieving 97.4% accuracy, leveraging features like brightness, FRP, and track dimensions.
- Created visualizations, including intensity distributions and feature correlation plots, to provide insights for disaster response.

Smart Traffic prediction

May 2024

- Collaborated with team members to predict the traffic conditions based on the traffic volume and the places. Different machine learning algorithms are used to predict the traffic, attaining accuracy of around 90%.
- Generated UI application using streamlit and flask to showcase the model.

Heart disease prediction

Feb 2024

- Our goal in this study was to use machine learning techniques to estimate the heart disease based on the different variables.
- Used different machine learning models to predict the heart disease condition of patients and accomplished an accuracy of 94%.
- We faced a challenge called class imbalance of the dataset. So, we resolved this with SMOTE technique.

CERTIFICATIONS

- SQL certification from Frontlines Edu Tech Private Limited (April 2024).
- Google Data Analytics (June 2022 from Coursera).
- Applied Robot Control 1.0 (APSSDC & APS GmbH European Centre for Mechatronics).