YASWANTH PATI

(609)-613-1289 .yaswanth.pati01@gmail.com .github.com/Yaswanth-pati .yaswanth-pati.github.io
.linkedin.com/in/yaswanth-pati/

EDUCATION

Saint Peter's university Jersey City, NJ
M.S in Data Science, GPA: 3.97/4.0 Feb 2023 - Feb 2025

Sree Vidyanikethan Engineering College Tirupati, India
B. Tech in Mechanical Engineering, GPA: 8.63/10.0 Jul 2016 - May 2020

PROFESSIONAL EXPERIENCE

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

- Cleaned raw data sets through rigorous preprocessing techniques leveraging Python and SQL; identified key trends which informed strategic business initiatives that enhanced operational efficiency by 30%.
- Reduced processing time by 20 hours monthly and boosted operational efficiency by streamlining data pipelines and optimizing integration with various data sources.
- Designed interactive web-based dashboards integrating SQL databases with Tableau and Power BI, enhancing audience engagement through continuous analysis and securing user satisfaction ratings above 90% across all platforms.
- Implemented a responsive design framework using HTML5 and JavaScript, which enhanced browser performance consistency and significantly improved customer satisfaction scores.
- Collaborated with diverse teams to develop data-driven web solutions, leading to a 30% reduction in project delivery time through the effective implementation of Agile methodologies and Git version control practices.

TECHNICAL SKILLS

- Programming Languages: Python (NumPy, Pandas, Scikit-learn, Matplotlib), R.
- Machine Learning: Supervised and Unsupervised Learning, Regression analysis, Classification, Clustering, Feature selection, Ensemble methods.
- Natural Language Processing: Tokenization, Word Embeddings, Named Entity Recognition (NER), Sentiment Analysis, Text Classification, Transformer Models, BERT.
- Data Analysis Tools: Tableau, Power Bi, Apache Spark, Excel, Azure.
- Tools: Excel, Git, Angular framework, Node.js, Juypter notebook, GitHub.
- Work Methodologies: Agile Environment
- Database Management Systems: SQL, MySQL, PostgreSQL.

NOTABLE PROJECTS

Route Planning for sensitive populations Nov 2024

- Innovated a comprehensive mapping tool integrating live data on pollutants from roadways via Azure Maps API; directly contributed to reducing daily commute-related respiratory issues by informing users about cleaner travel options available.
- Developed a comprehensive route visualization system integrating air quality indicators and climatic factors; enabled for users to access critical environmental information directly from interactive tool tips.
- Designed interactive features facilitating intuitive vocal inputs for geographic routes; streamlined data retrieval processes reduced average query handling time from two minutes to just under fifty seconds per request.

Wildfire prediction Nov 2024

- Devised an advanced predictive model utilizing brightness values from the MODIS and VIIRS satellite dataset, achieving a classification accuracy of over 95% through rigorous cross-validation against real-world wildfire conditions.
- Achieved high accuracy in intensity classification using a Random Forest Classifier, with results validated through cross validation. Established a Confidence Level Classification Model, achieving 97% accuracy, leveraging features like brightness, FRP, and track dimensions.

Smart Traffic prediction May 2024

- Analyzed historical traffic volume and location data within a cross-functional project, identifying critical patterns that informed strategies to tackle the largest causes of congestion-related incidents with 90% accuracy.
- Delivered comprehensive visualizations through an engaging UI built on top-tier frameworks like Streamlit combined with flask technologies enabling clear communication regarding vital findings essential for refining emergency management strategies.

Heart disease prediction Feb 2024

- Conducted a comprehensive study utilizing advanced machine learning techniques to assess heart disease risk factors, achieving an impressive accuracy of 94% in predicting patient health outcomes based on varied clinical variables.
- Resolved significant challenges related to imbalanced datasets using the SMOTE technique; this intervention improved model reliability and attained an outstanding prediction accuracy rate of 94%, gaining patient outcome assessments.

CERTIFICATIONS

- SQL certification from Frontlines Edu Tech Private Limited (Apr 2024).
- Google Data Analytics from Coursera (Jun 2022).