PSAIRAM KUMAR

Data Scientist

PROFESSIONAL SUMMARY

Experienced educator with 5 years of teaching SQL, Python, C-Language, and Advanced Excel, now transitioning into a Data Scientist role. Recently completed a **Master's in Data Science** with hands-on experience in **statistical modeling**, **machine learning**, **data cleaning**, and **visualization**. Skilled in turning raw data into actionable insights through real-world projects using tools like **Pandas**, **Scikit-learn**, and **Power BI**. Eager to use data skills to solve business problems and drive decisions.

SKILLS

- Tools: MS SQL Server, Power BI, Excel (Advanced), MongoDB (Basic)
- Languages: SQL, Python, JavaScript, C, HTML, CSS
- Python Libraries: Pandas, NumPy, Scikit-learn, Seaborn, Matplotlib, Plotly, NLTK
- ML/NLP: Machine Learning, NLP, Text Classification, Model Building
- **Development**: Jupyter, VS Code, GitHub, Streamlit
- **Data Concepts**: ETL/ELT, Data Warehousing, Star Schema
- Soft Skills: Communication, Problem-Solving, Analytical Thinking

PROJECTS

Project Name: Horse Race Outcome Prediction

GitHub: Link

Tools: Python (Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn), Jupyter Notebook

- Built a **predictive classification model** to forecast winning horses based on historical race data.
- Cleaned and encoded complex race attributes like **track condition**, **horse rating**, and **jockey details**.
- Performed **EDA** to identify key performance indicators and trends in horse win rates.
- Trained Logistic Regression, Decision Tree, and Random Forest models.
- Achieved accuracy of ~87% with Random Forest, outperforming baseline models.
- Evaluated model using **confusion matrix**, **classification report**, and **ROC-AUC curve**.

Project Name: Singapore Resale Flat Price Prediction

GitHub: Link

Tools: Python (Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn), Jupyter Notebook

- Built a **regression model** to predict **HDB resale flat prices** using historical housing data.
- Performed detailed **EDA** and **feature engineering** (flat age, town encoding, floor area).
- Applied and compared models: Linear Regression, Decision Tree, and Random Forest Regressor.
- Achieved R² score of 0.89 with Random Forest, indicating strong model fit.
- Evaluated with **RMSE**, **residual plots**, and **train-test split** validation.
- Created insightful **visualizations** for predicted vs. actual prices and price trends.

EXPERIENCE

Computer Teaching & System Administration Nallam Residential Concept High School	strator		iii 11/2022 - 05/2025 (Full Time)
Computer Faculty Ct&t Computer Institution			iii 01/2018 - 01/2022 (Full Time) iii 11/2022 - Present (Part Time)
EDUCATION			
Professional Master Data Science Pr	ogram	GUVI	
B.Sc Mathematics	Dr. S.R.K Govt Arts College		iii May 2014 - May 2017
CERTIFICATIONS			