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EDUCATION

Nalla Malla Reddy Engineering College Hyderabad,Telangana,India
Bachelors of Technology in Artificial Intelligence and Data science; CGPA 8.2/10 *Jun 2021 - May 2025*

SKILLS

Languages: Python ,C++, JavaScript.

Machine Learning : Supervised & Unsupervised Learning, Model Evaluation,Hyperparameter Tuning, Cross-Validation **,** Data Preprocessing, Feature Engineering.

Data Handling & Visualization: Data Cleaning & Preprocessing **,**Exploratory Data Analysis (EDA).

Web Development (MERN Stack) & other : React.js, Next.js, Tailwind CSS**,**Node.js, Express.js, MongoDB**,**RESTful APIs, JWT Authentication**,**State Management (Redux, Context API), DSA, problem solving skills.

Deployment & Tools: Flask **,**Git **,**Jupyter Notebook, Google Colab,Anaconda,Spyder,Vscode.

PROJECTS

Predicting Employee Attrition : *streamlit,scikit-learn,Support Vector Classifier (SVC), Feature Engineering, Label Encoding, Hyperparameter Tuning, pandas, numpy.* **[GitHub] [Live Deployed Link]**

- Developed an **SVC (Support Vector Classifier) model** for employee attrition prediction.
- Implemented **feature engineering** and **label encoding** to preprocess categorical data.
- Compared **XGBoost and SVC**, optimizing hyperparameters for better accuracy.
- Achieved 87**% accuracy**, identifying key factors influencing attrition.
- Deployed the application on **Streamlit Cloud**, making it easily accessible for users.

Customer Feedback Analysis : *Hierarchical clustering,NLP,nltk,Dendogram,PCA,Clustering* **[GitHub]**

- Developed a system to analyze customer feedback from **Twitter airline reviews** using **Hierarchical Clustering**.
- Implemented **text preprocessing** (tokenization, stopword removal, TF-IDF vectorization) to convert raw text into numerical features.
- Applied **Agglomerative Clustering** to group similar customer reviews, identifying patterns in sentiment and common issues.
- Utilized **dendrograms and PCA visualizations** to analyze cluster relationships and provide insights.Achieved improved customer sentiment understanding without predefined sentiment labels, aiding in business decision-making

Multiple Disease Prediction System :*streamlit,scikit-learn(Logistic Regression, SVM),nltk* **[GitHub][Deployed Link]**

- Developed a **disease prediction system** to assess health risks for **Diabetes, Heart Disease, and Parkinson's Disease** using **Machine Learning (ML)**.
- Implemented a **Streamlit-based web application** for real-time health risk assessment.
- Trained models using **Scikit-Learn** with **Logistic Regression, SVM, and other classification algorithms** on medical datasets.
- Performed **data preprocessing, feature selection, and model evaluation** to ensure high prediction accuracy.Integrated **Pandas & NumPy** for data handling and processing.
- Deployed the application on **Streamlit Cloud**, making it easily accessible for users.

Big Mart Sales Prediction: *Machine Learning, XGBoost, Regression (Sales Forecasting)***[GitHub]**

- Developed a **sales forecasting system** that predicts **Big Mart sales revenue** using **Machine Learning (ML) regression models**.
- Implemented **XGBoost Regressor**, a powerful gradient boosting algorithm, to enhance prediction accuracy. Conducted **data preprocessing**, including handling missing values, categorical encoding, and feature selection for optimal model performance.