

Customer Churn Prediction for Telecom

Industry: Telecommunications

Description: Predict which customers are likely to leave a telecom provider based on usage and demographic data.

Instructions:

1. Load and clean the dataset, handling categorical variables (e.g., one-hot encoding).
2. Perform exploratory data analysis (EDA) to identify key predictors (e.g., contract type, monthly charges).
3. Train a classification model (e.g., Decision Tree, Gradient Boosting).
4. Optimize the model using cross-validation and tune hyperparameters.
5. Visualize results with a feature importance plot.

Dataset: [Telco Customer Churn Dataset \(Kaggle\)](#)

Tools: Python, Pandas, Scikit-learn, Matplotlib