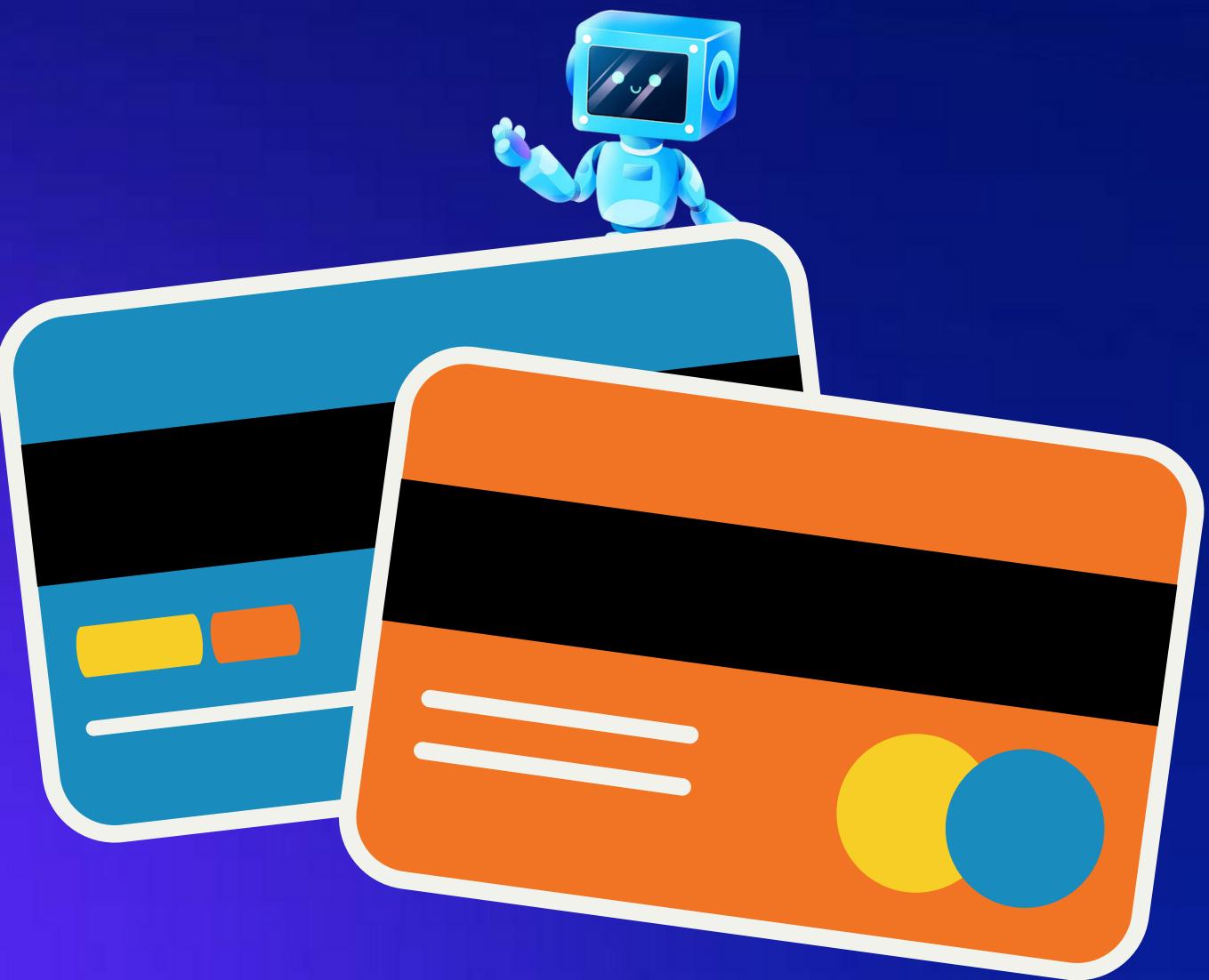


PREDICTION FOR CREDIT CARD APPROVAL

By Jay Thoriya



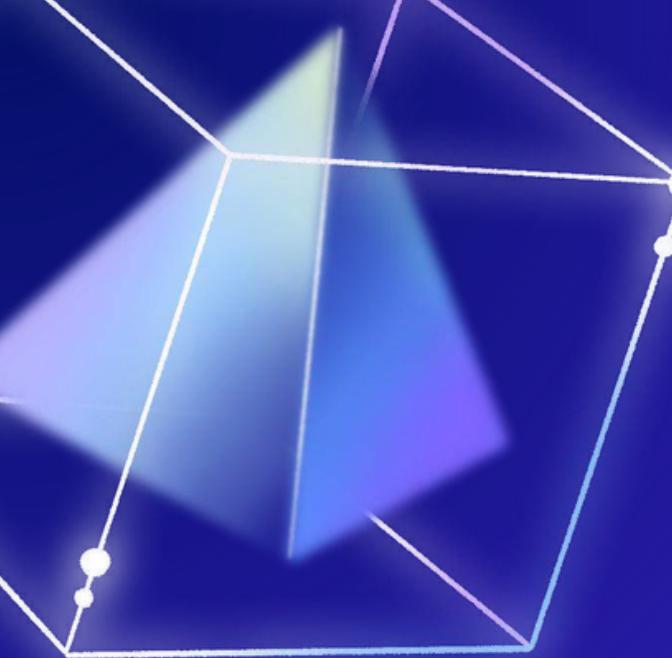


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PROBLEM STATEMENT

The primary objective of this project is to predict the approval or rejection of credit card applications. The challenge lies in understanding the key factors influencing credit card approval decisions and building a predictive model to assist in the decision-making process.



DATA PREPROCESSING

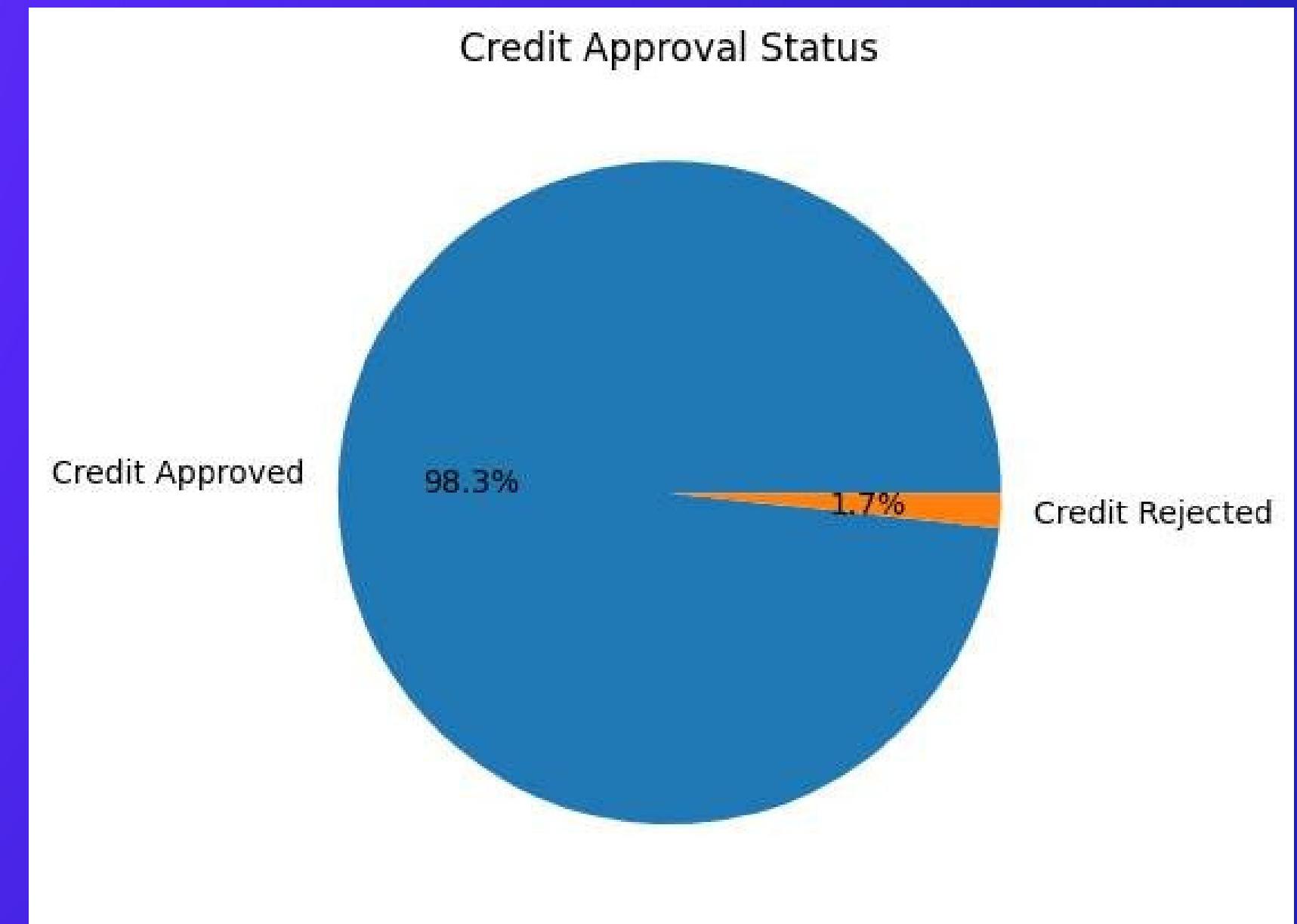
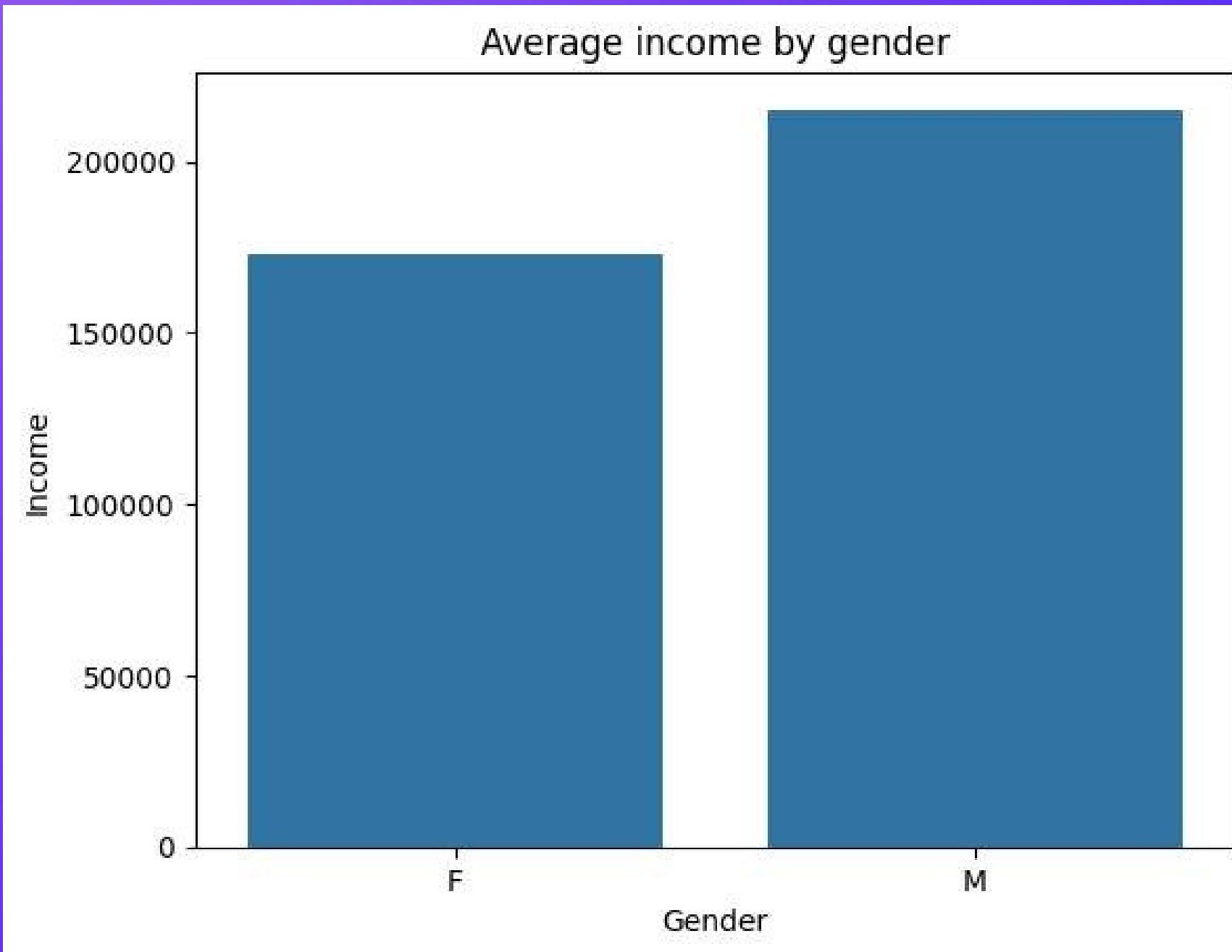
In this step we checked for any missing or duplicated values, then getting info of the data we have, later converting the categorical features to numerical values.





DATA ANALYSIS

At this step, Exploratory Data Analysis (EDA) is done to get valuable insights through data visualization, statistical measures, univariate and bivariate analysis.



MODEL DEVELOPMENT

Machine Learning models like logistic regression, decision trees, random forests and Boosting Algorithms are trained using train data which is again a subset of the given train_data.csv.



MODEL EVALUATION

After training the model, now we had to evaluate the model to see how well our model will be performing on unseen data using evaluation metrics like accuracy, precision, recall, F1-score, confusion matrix and ROC AUC. So, we fed test data from the train_data.csv to the models to predict.



PREDICTION



Finally, the trained models are used for predicting credit cards of new data i.e., test_data.csv. And at this step, Logistic Regression and Decision Tree Classifier was used to predict the test_data.csv.

RESULT AND CONCLUSION

(01)

So, we got better metrics in Decision Tree Classifier and Random Forest Classifier and comparatively low with others.

(02)

• As the data was imbalanced it was difficult for the model to exactly predict the new test_data.csv. So, there is still more scope of improving the accuracy of the models.

Thank You

