Loan Prediction Analysis using Machine Learning

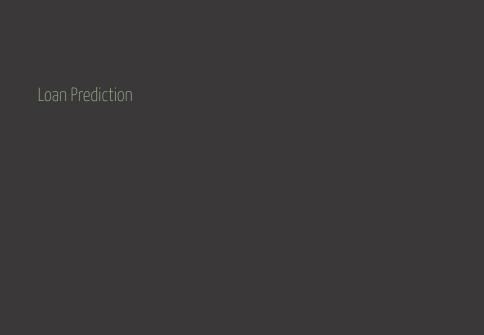
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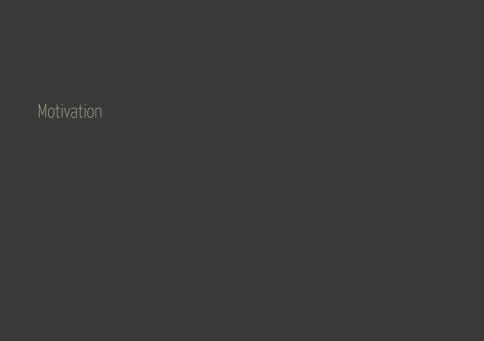
on June 25, 2021



» Initials

Loan

- Banks and Companies provide loans to individuals who apply for loan
- But, Banks/companies have limited assets
- Finding out an eligible individual to whom loan can be granted safely is an important and typical process



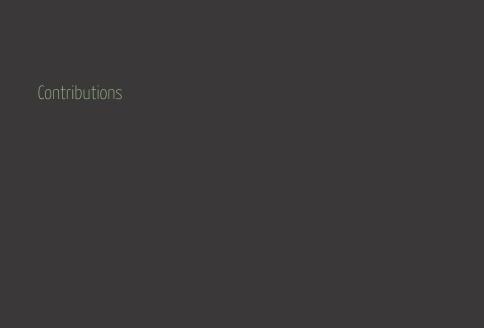
» Motivations

Motivation Scenerio

- * Dream Housing Finance company deals with home loans
- * Customers apply for home loans and company validates their eligibility for loan
- * They want to automate their loan eligibility process

Goal

Build an interface to predict whether any person loan would be approved or not (Using Machine Learning approach)



» Contributions

In this project, we

- Proposed a classification model to automate loan eligibility process
- * It predicts eligibility for loan of any individual

Dataset

Used Kaggle Loan Prediction Problem Dataset



Advantages

- Such model is useful for automating the process of validating loan eligibility
- Reduces manual effort of bank/companies and increase productivity



» Project Demonstration

Dataset

Dataset link is given here

Project

Github link of project is given here

» Utilized ML Libraries

- * numpy
- * pandas
- * Matplotlib.pyplot
- * seaborn
- sklearn.model_selection import train_test_split, cross_val_score
- st sklearn.metrices import confusion_matrix
- sklearn.linear_model import LogisticRegression
- * sklearn.tree import DecisionTreeClassifier
- sklearn.ensemble import
 RandomForestClassifier, ExtraTreesClassifier

Libraries and Model

- Julibrarios for data analysi
- * Libraries for data analysi

» Utilized ML Models

- * LogisticRegression
- * DecisionTreeClassifier
 - * RandomForestClassifier
- * ExtraTreesClassifier
- * XGBClassifier



» Conclusion

Conclusion

- Used Hyperparameter tuning on RandomForestClassifier
- Used Confusion Matrix for evaluating prediction performance

Thank you for your attention! Have a Good Day