



Mortgage Prediction

Predict Loan Amount for Customer using RAPIDS Libraries

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Objective:

Customers have to always face the problem of having to go through all procedures of loan issues to get to know an estimate of the loan amount.

By automating the loan amount to the customers so they can see the estimated amount from the website or app.

It will also help Bank or Finance Company with their marketing campaigns.

Goal:

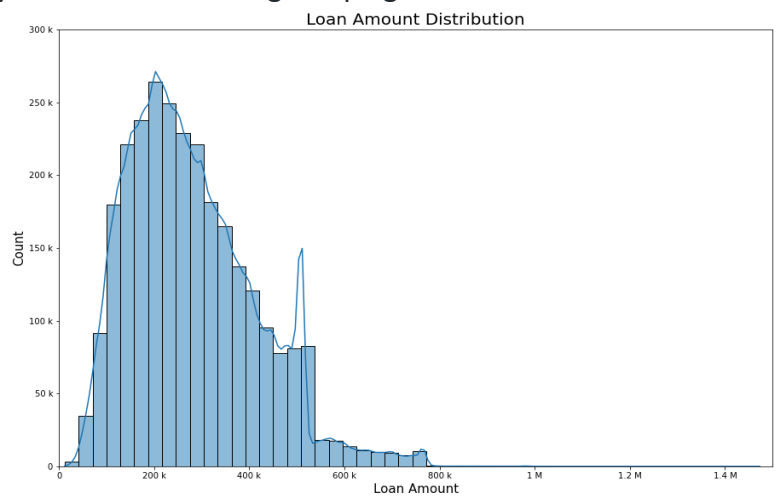
Predict the loan amount using random forest model.

Challenges:

- Large data size
- Data Cleaning
- Limited Time
- Tune Model

Process:

- EDA
- Data Cleaning
- Prep data for ML
- Fit Model
- Enhance Model



Findings:

- Retail origination channel is of utmost use by the party that delivered the loan to the issuer.
- The No. of customers joining Homeready Program in the 3rd Quartier is very low.
- Majority of customers choose to not have Mortgage Insurance.
- Loan Purpose for the newest loans is either a refinance mortgage
- Most of the customers not qualifies as a first-time homebuyer.

Model Performance:

The model predict the Loan amount and here you can see the model performance.

Where the MSE was **\$22,663.648**

So the prediction is off only by **\$22,663.648**.

Enhance Model:

The MSE was **\$66,342.09**.

