

CASE STUDY: SHOULD THIS LOAN BE APPROVED OR DENIED?

Machine Learning Project | Coding Dojo



Tech Up

PROJECT AGENDA

Project Proposal

- Case Study
- Data We Work With
- Model We Used
- Project Result

A Brief Project Proposal

Loan approval is a very important process for banking organizations. And it is very difficult to predict the possibility of payment of loan by the customer. In recent years many researchers worked on loan approval prediction systems.

In this project we will explain about

" Loan Eligibility Prediction "
by

Python Machine Learning.

It's a very useful in predicting
outcomes for large amounts of data

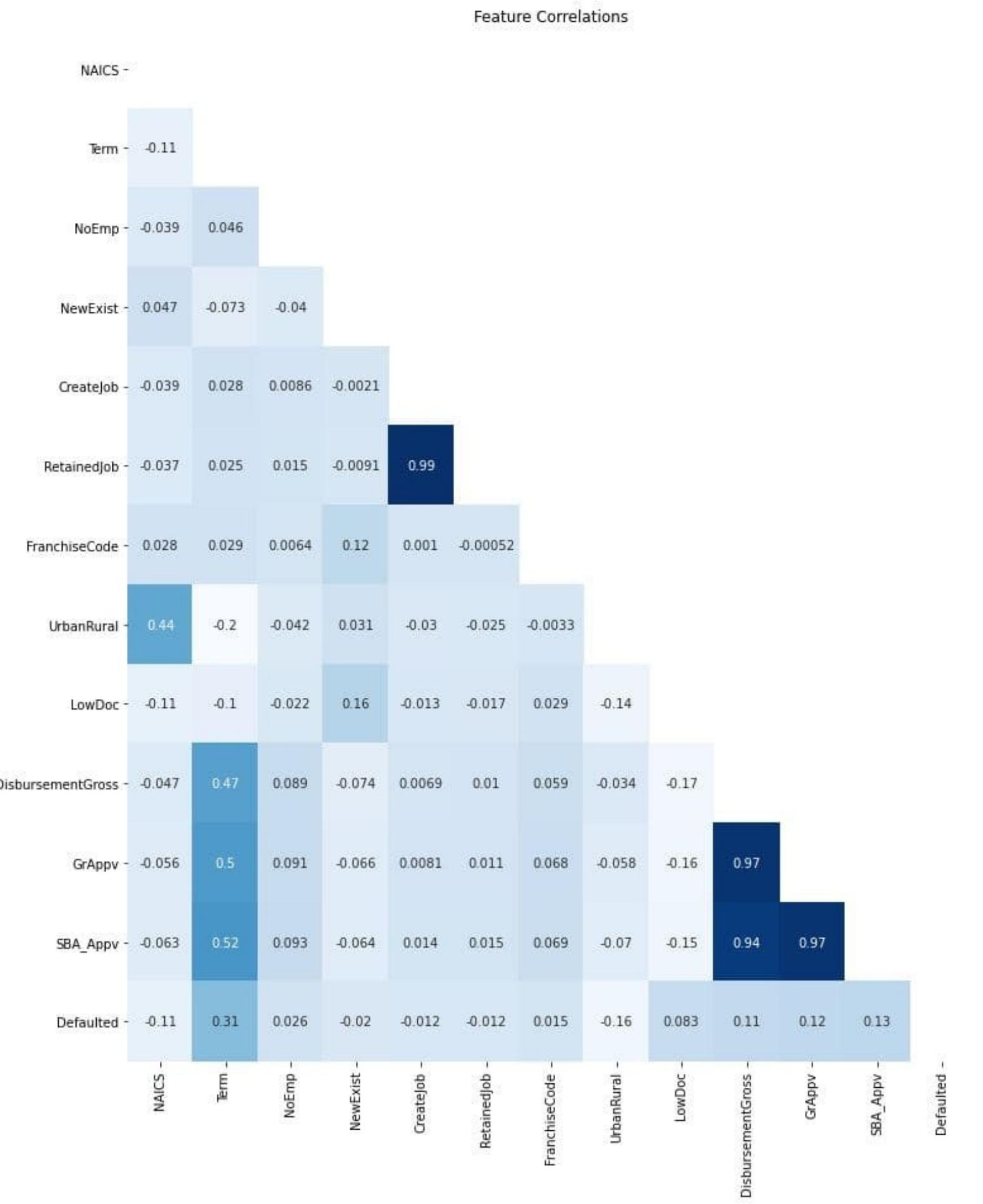


These are the following items in our projects:

- ◆ **The Use Case:**
Eligibility for the loan.
- ◆ **The Data We Work With:**
The dataset is from the U.S. Small Business Administration (SBA)
- ◆ **The Model:**
The creditworthiness of loan applicants is predicted using **Random Forest**.
Because the lending institution can better decide whether or not to lend to the customer.

KEY INDICATORS

NEXT 



1# Retained Job and Creation have a strong positive correlation (0.99), which means that the positions would have been eliminated if not for Recovery Act funding.

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2# Gross Approval and Disbursement Gross have more strong positive correlation (0.99) than SBA Approval and Disbursement Gross (0.94). We noticed that the gross approval amounts include both the SBA guaranteed portion and the non-guaranteed portion of the loan. There is a strong relations between SBA Approval and Gross Approval as showed in visualization (0.97).

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3# Term and Disbursement Gross have a strong positive correlation (0.47), which means that loans with larger terms are usually large.

REFERENCES

- **DATASET LINK:**

<https://www.kaggle.com/mirbektoktogaraev/should-this-loan-be-approved-or-denied/version/2>

- **GITHUB LINK:**

[Week-7-Project/Project_Draft.ipynb at main · Shehanh1/Week-7-Project · GitHub](https://github.com/Shehanh1/Week-7-Project)

THANK YOU

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