

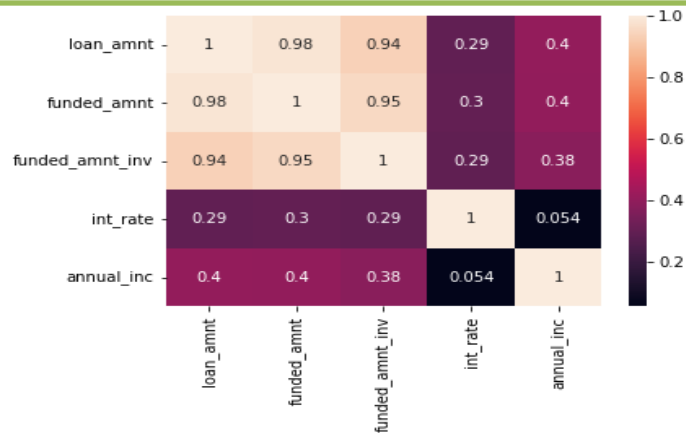
Lending Club: EDA Case Study

Presented by:
Ganesamoorthi M
Gautam Poddar

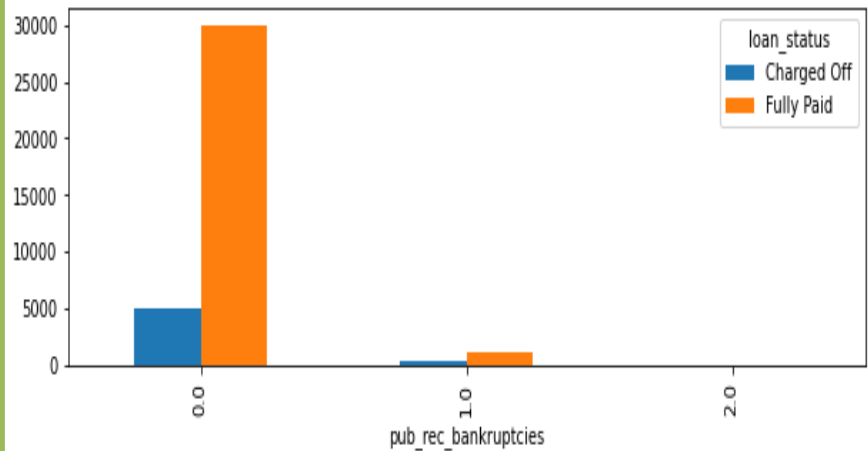
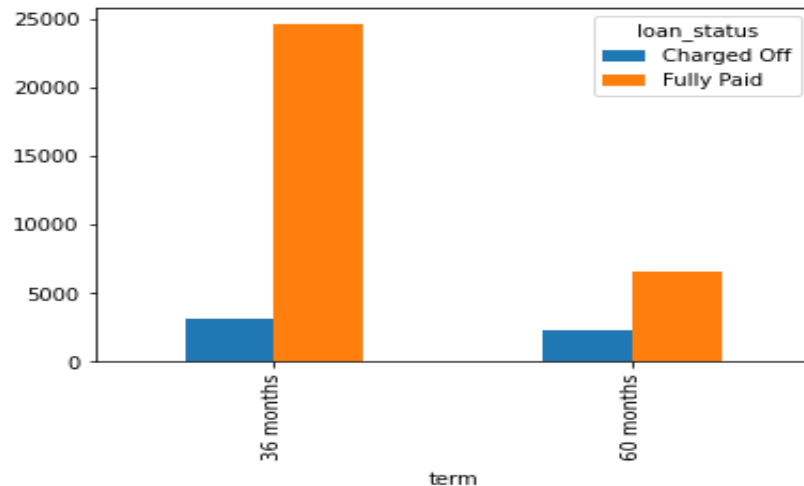
Case Study Analysis

- **Business Problem**
 - consumer finance company which specialises in lending various types of loans to urban customers. When the company receives a loan application, the company has to make a decision for loan approval based on the applicant's profile.
 - Suggest that whether the person will repay the money.
- **Key Observations from Dataset**
 - Higher the Interest rate and higher the loan amount is causing the Higher charged off .
 - Higher Charged off is happening between Sep, Oct, Nov and Dec Month - It based on loan issued date.
 - Small Business purpose loan has high impact on Charged Off.
 - 60 Months payments loans has high impact of charged-off.
 - lower income range is the more risky when it comes to loan repayment.
 - Higher instalments has more risks of charged off.
 - Applicants having public record bankruptcies has more risk of charged off.
- **Key Assumption**
 - Here we have considered the missing employee length as Zero.
 - Here we considered pub_rec_bankruptcies empty value as Zero
 - We have set the outlier limit as 95% and excluded the records
 - Excluded the columns which is not a driving factor and not many unique values.

Key Observation From Dataset



loan_status	Charged Off	Fully Paid
int_rate		
20.40	1.0	2.0
20.48	8.0	12.0
20.52	1.0	NaN
20.53	2.0	7.0
20.62	14.0	26.0



Recommendations

- Higher tenure(60 Months) loans are high risky than lower tenure(36 Months) loans.
- Highest loan amount has more risk than compare to lower the loan amount.
- More likely small business has high risk than other categories.
- Higher the interest has more risk of charged-off.
- Lower income has higher interest repayment will have a higher risk of repayment of amount.
- Employment length is also one of the driving factor. Based on the employment length(Higher employment) we can consider to give a loan to a person.
- CA,FL,NY and CA address states has higher charged-off.
- F and G grade has high Charged off ratio.
- Applicants having public record bankruptcies has more risk of charged off.