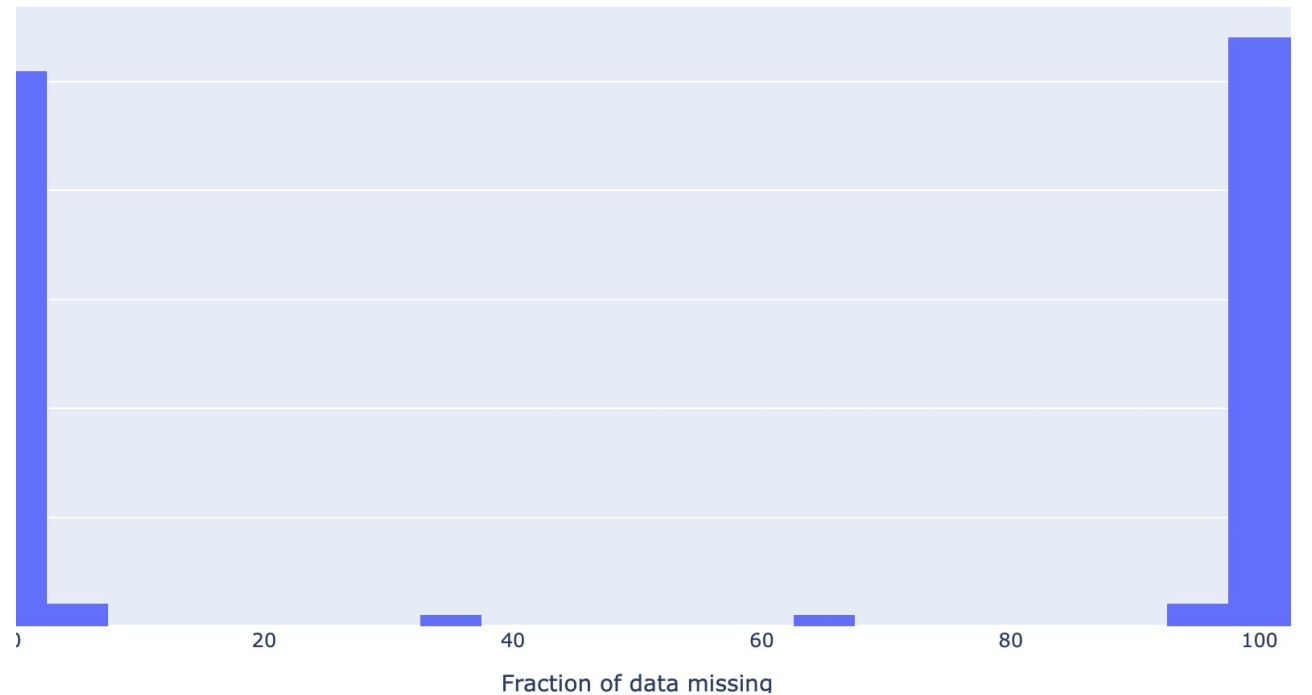


Lending Case Study

Poornima T A, Jagadeesh Manepalli

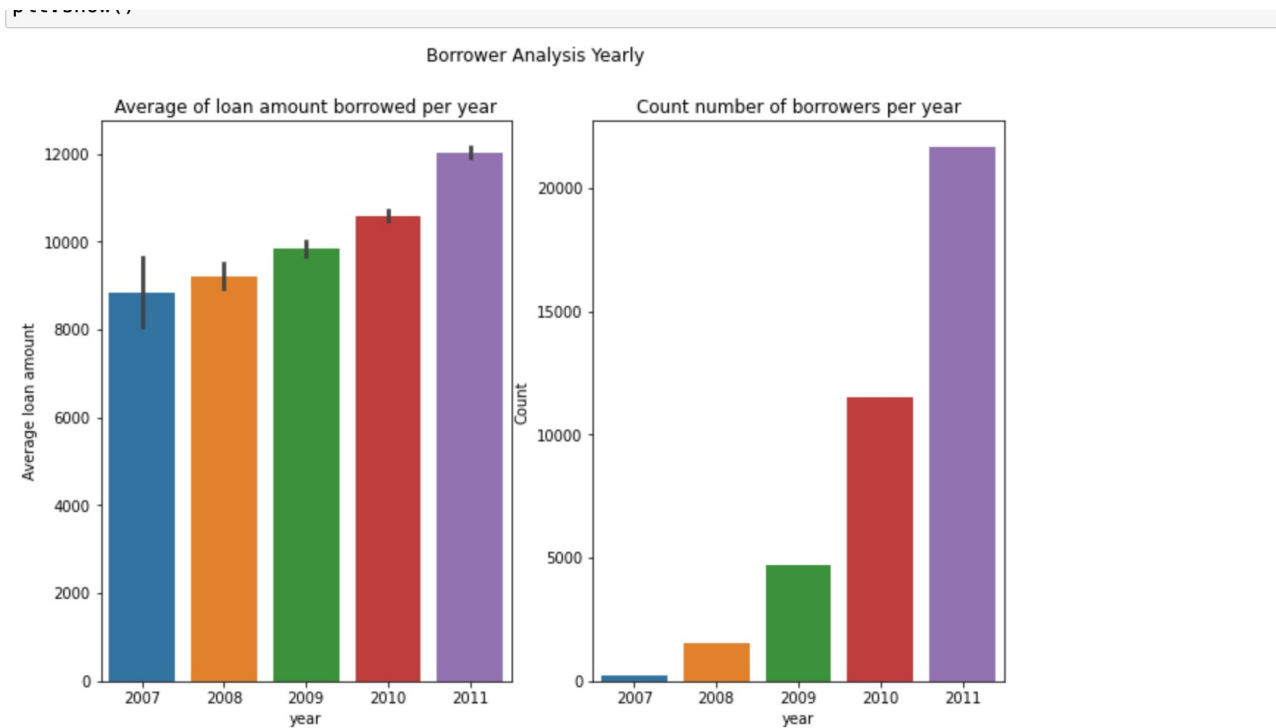
Data Cleanup

g data distribution



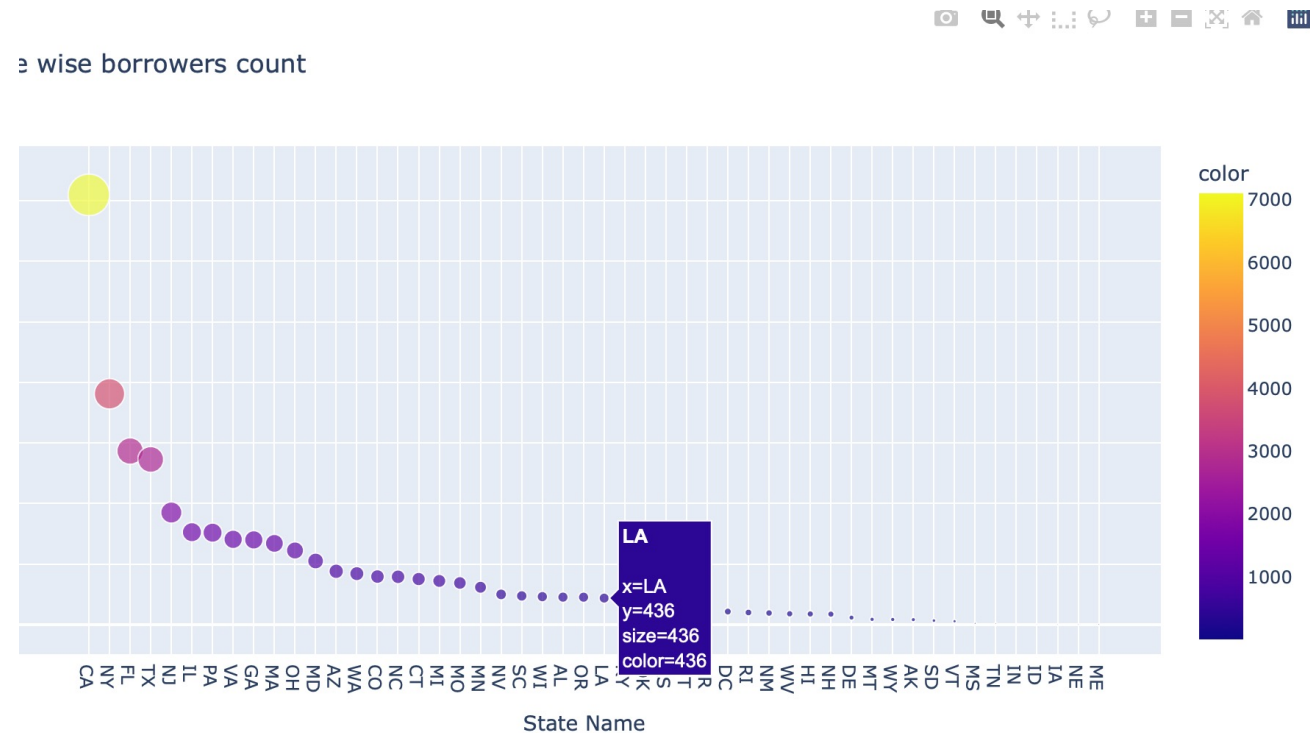
- It was observed that 50+ features had complete null and nan values
- The feature which had more than 30% nan values were dropped

Yearly Analysis



- Average loan amount has increased every year
- Number of borrowers have increased drastically in 2010 - could be due to the **great recession in year 2010**

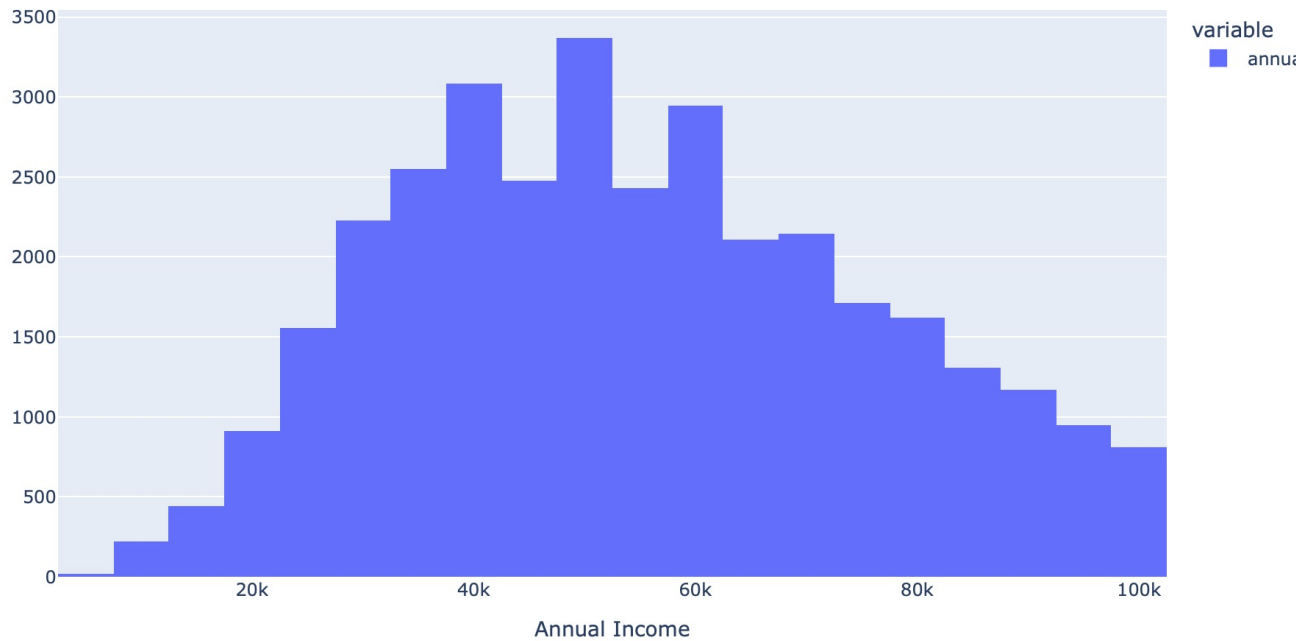
Area-wise analysis



- Higher number of borrowers from metro cities like California(CA), New York(NA), Florida(FL), Texas(TX) etc.
- This may be due to higher population count in metro cities.

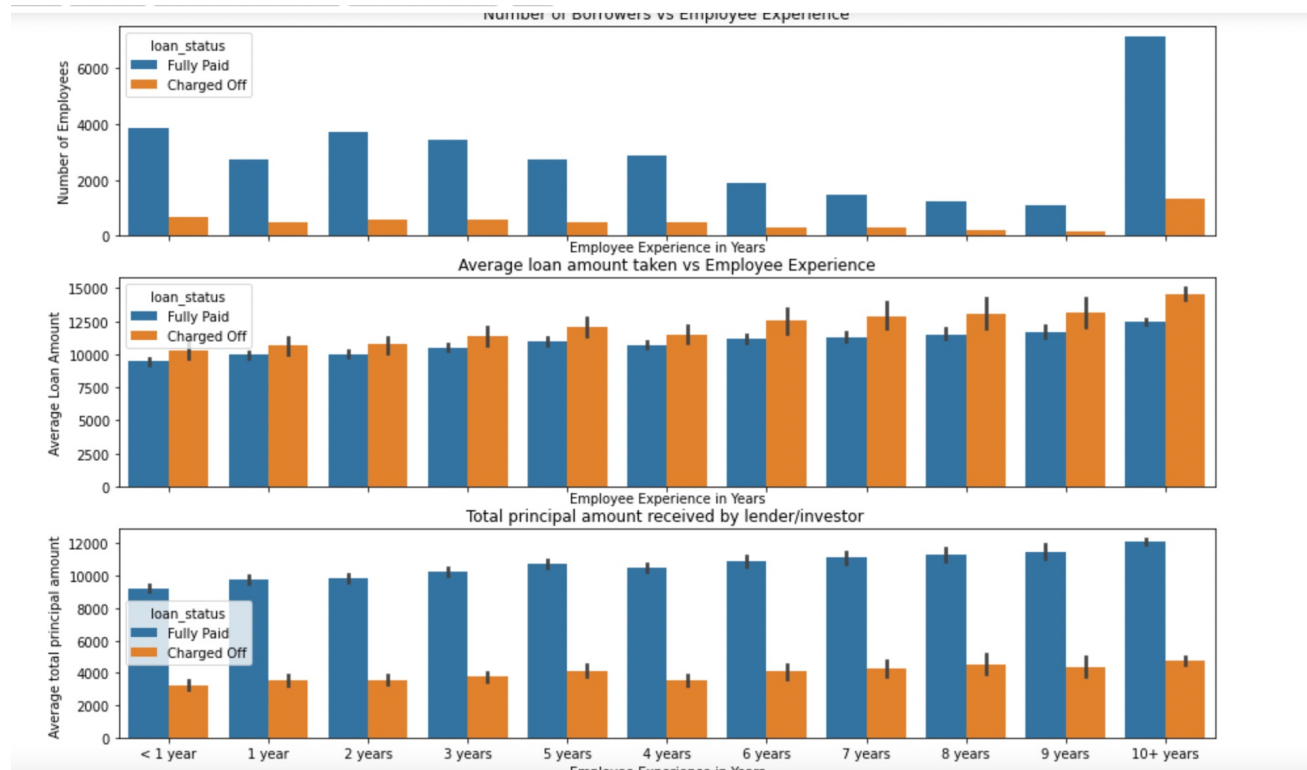
Annual Income

Borrowers Annual Income



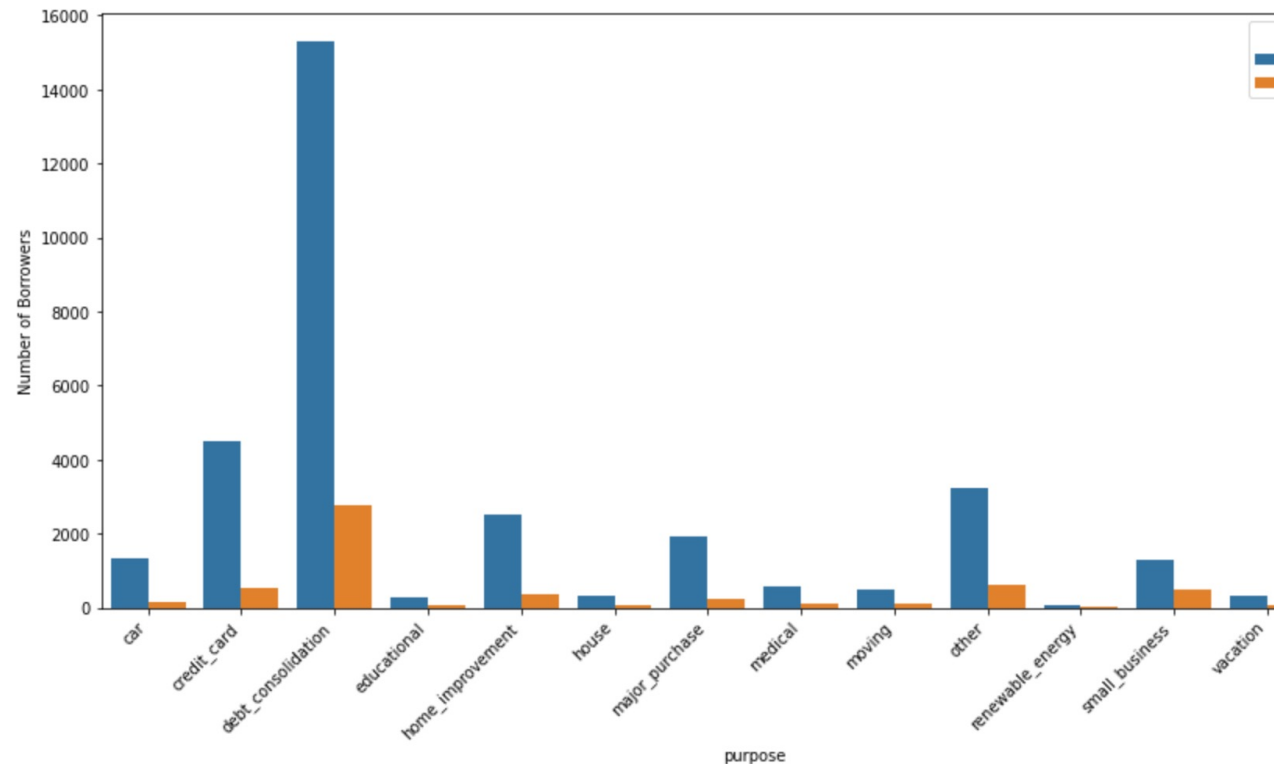
- The annual income of most borrowers is \$54,844

Employee experience, Loan Status, Principal Amount



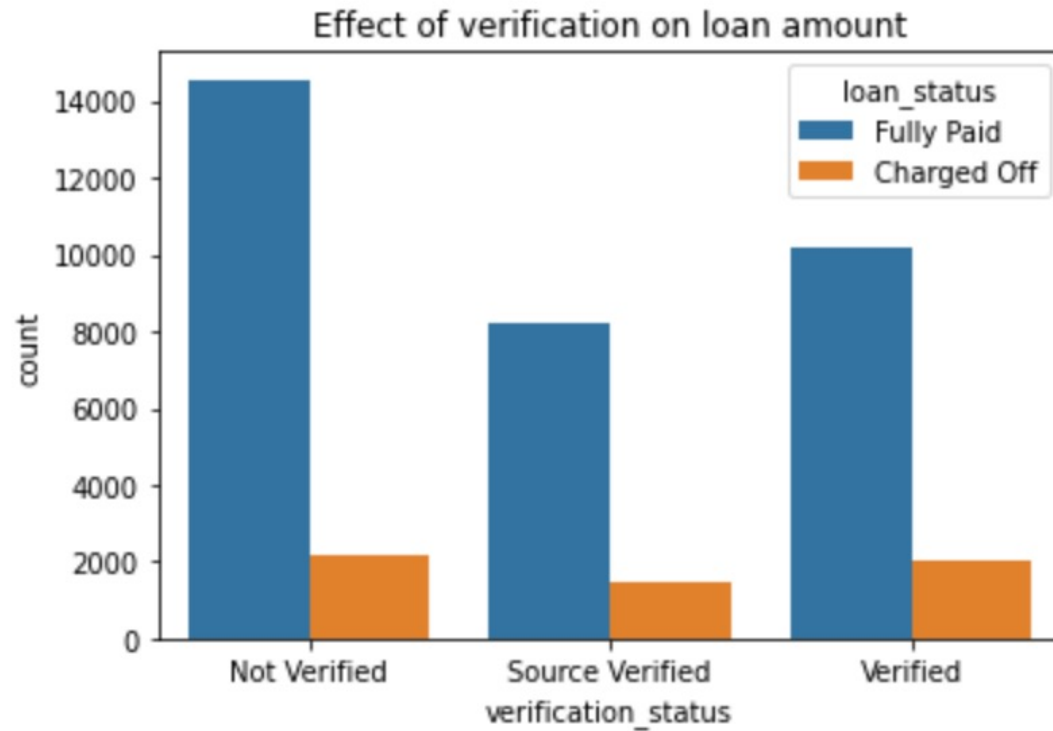
- People with lot of experience or very low experience seem to default more
- Employees with mid-level experience default lesser
- Lenders collect almost double the principal amount from the borrower, hence investors have a high profit over the years.

Loan Purpose vs Default



- People who borrow money for
 - debt consolidation
 - credit card repayment
 - Small Businesses
- are high defaulters

Verification Status



- Non verified borrowers default more

Conclusion

- The main feature to be considered are
 - Loan Amount
 - Loan Purpose
 - Employee Experience
 - Term
 - Loan Status
- People with higher experience default
- People in metros have more borrowers
- Interest rate for defaulters is more than that for fully paid
- Defaulters take loan for Small Businesses, Credit Card Payment and Debt Consolidation