Analysis of Lending Club Risk Model

Overview and problem statement

- The interest rate assigned to a loan should reflect the risk involved with the loan.
- Interest rate is determined by our risk model
- Is our risk model performing well?

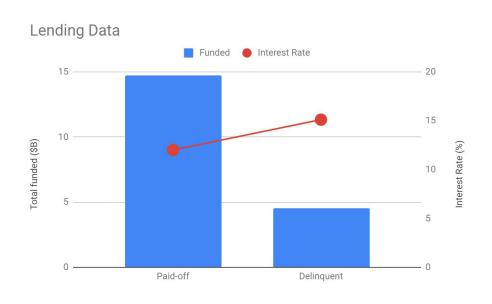
Data analyzed

- Approximately 1.3M records from 2007 2015
- All fixed rate loans
- Link to Kaggle dataset

Focus: compare int rate charged between delinquent loans vs loans that were paid off



Statistically significant difference between delinquent and fully paid:



- With 95% confidence, the average interest rate is 3.1% higher for the delinquent loans
- Risk model working, but ...

Room for improvement

- Is loan book profitable?
- Improvements to risk model
- Improvements to loan model in general



Questions?

Thank You