



# Lending Club

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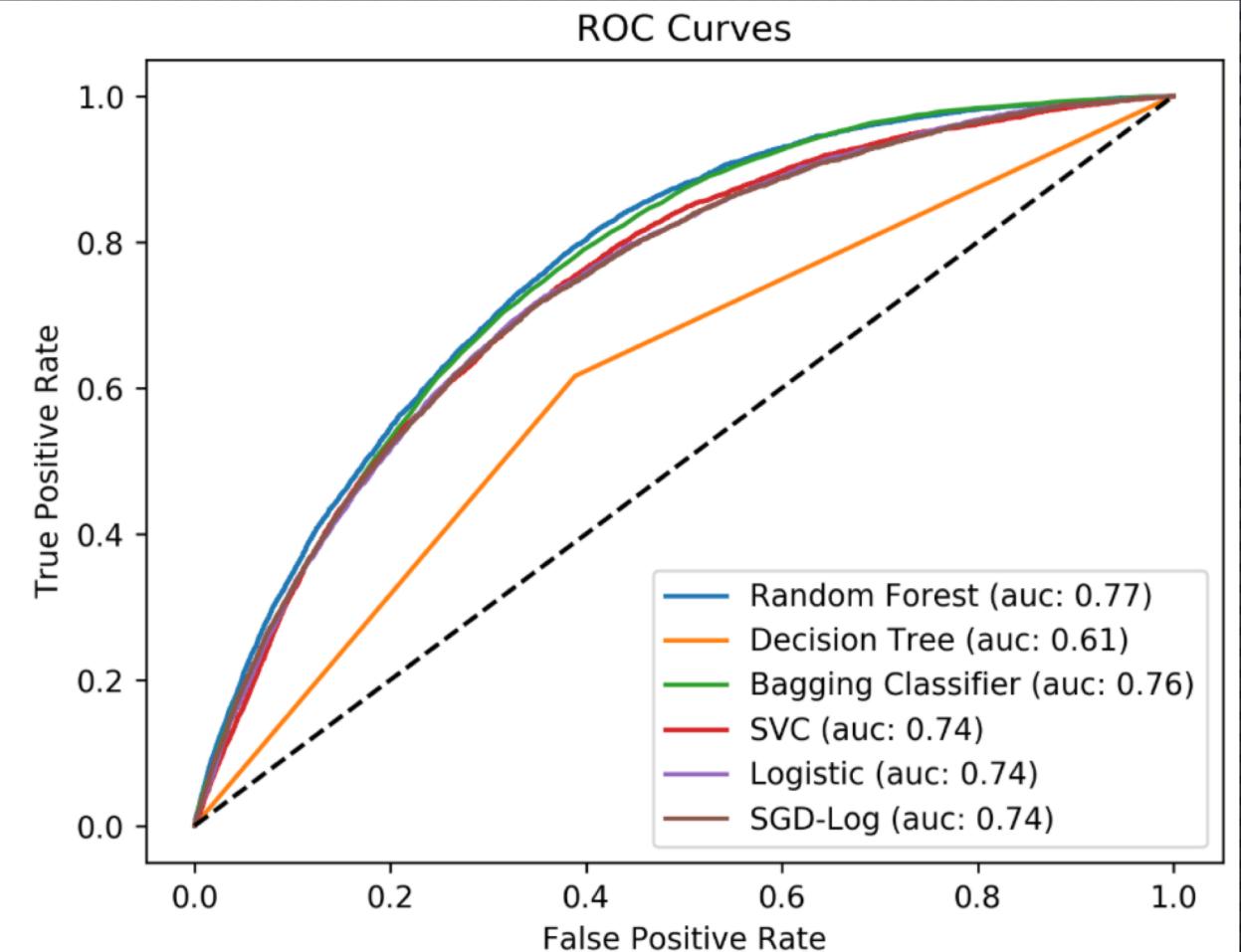
# Background

- Lending Club: P2P lending platform
- Return: -9.4% to +13.8%
- Questions:
  - How to predict default?
  - Anyway to manage outcome?
  - How to make better decisions?



# Approach

- Challenges:
  - Highly imbalanced
  - Many features were categorical
  - Transforming data
- Model Selection



# Modeling and Finding

- Optimized model
  - True Positive: 72%
  - Top factors driving the default
    - Debt to Income Ratio
    - Loan Grade
    - Purpose



# Upcoming App

## That Sinking Feeling

Because sometimes, default hurts



Magic model helps predict whether you can get your investment back!

### The Amazing Lending Club App

--Will the borrower default?

**Loan Term**

- 36 months
- 60 months

**Loan Grade**

A

**Purpose**

Consolidation

**Debt to Income Ratio**

Ratio set to 0.2

**Make prediction** Good investment. Your loan is predicted to have a default rate of 12.4%

Like this? Hire us to solve your challenging business problems!

# **Take-aways and Next Steps**

## **Take-aways**

- Loans are not created equal
- Use our model to make better decisions

## **Next steps**

- Continuous improvement
- Mass prediction
- Evaluate behavior changes over time