

Predicting UFC Winners

About Me

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Overview

Business Problem

Data

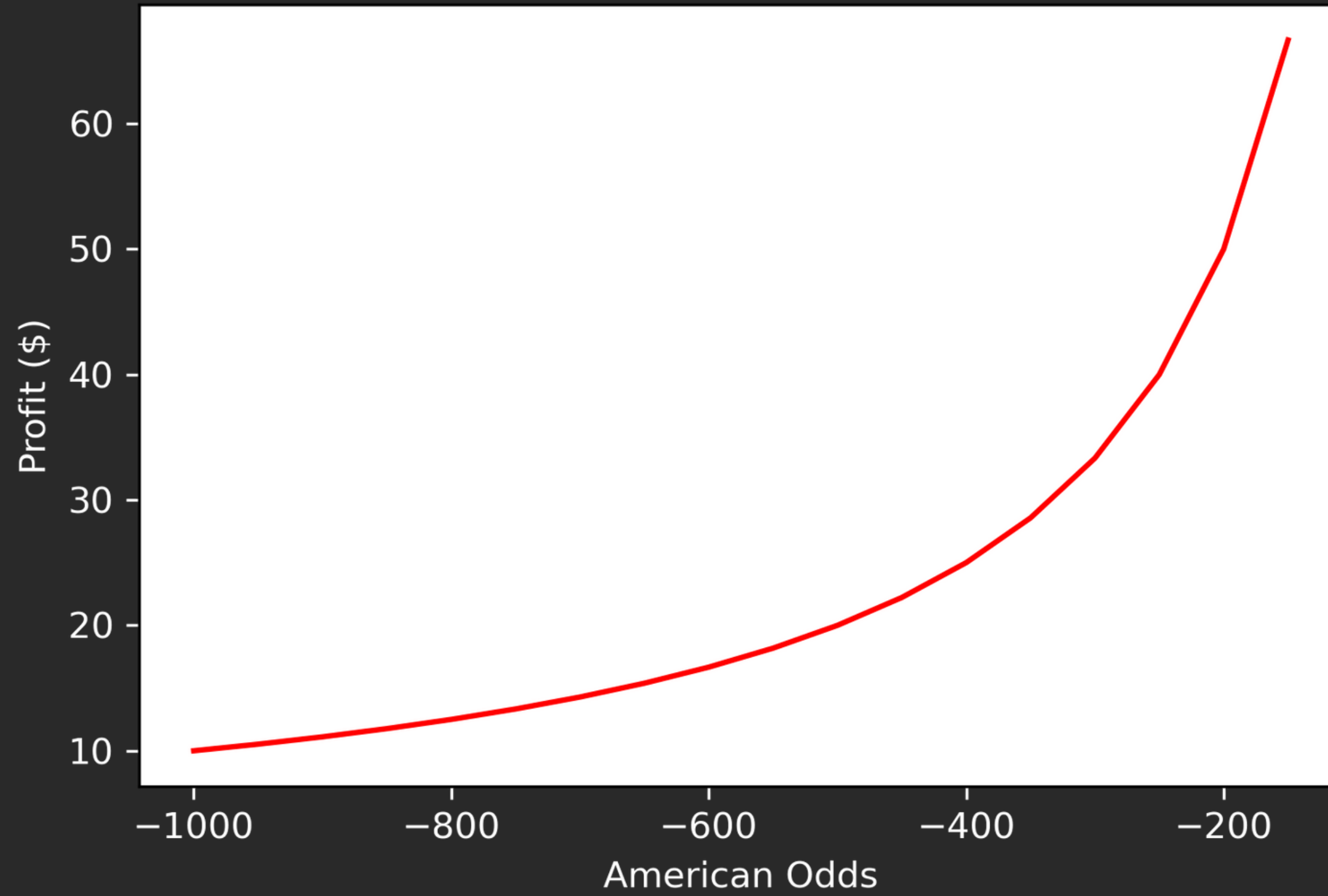
Methods & Models

Conclusion

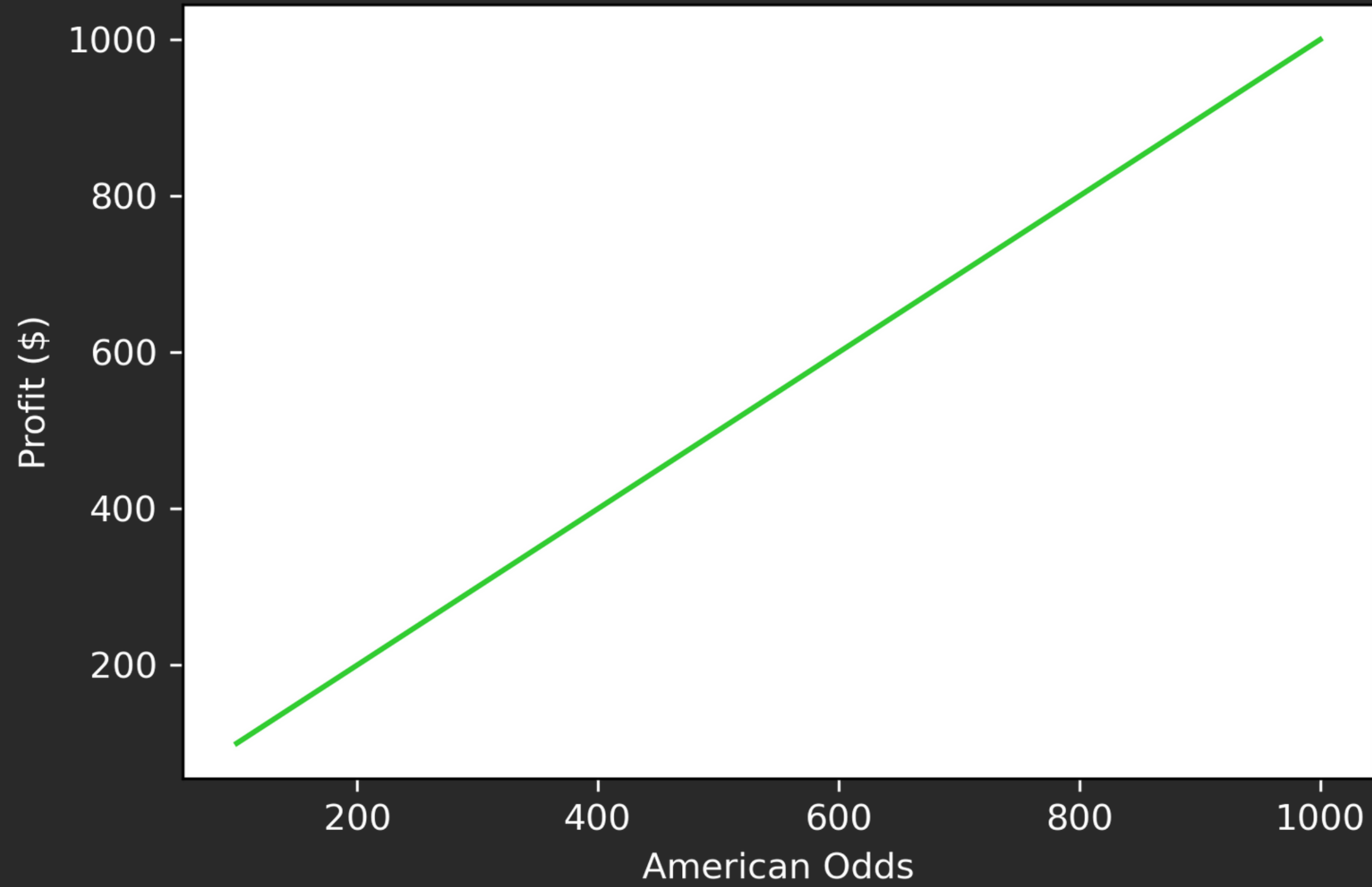
Business Problem

- Predicting winners
- Favorite v. Underdog
- Make a profit

Betting \$100 on Minus Odds



Betting \$100 on Plus Odds



Israel Adesanya	-550 ▲	Profit: \$410
Sean Strickland	+410 ▼	
Alexander Volkov	-238	Loss: \$100
Tai Tuivasa	+195 ▲	
Anton Turkalj	-122 ▲	Loss: \$100
Tyson Pedro	+102 ▼	
Austen Lane	+164 ▲	Profit: \$102
Justin Tafa	-198 ▼	
		Total Profit: \$312

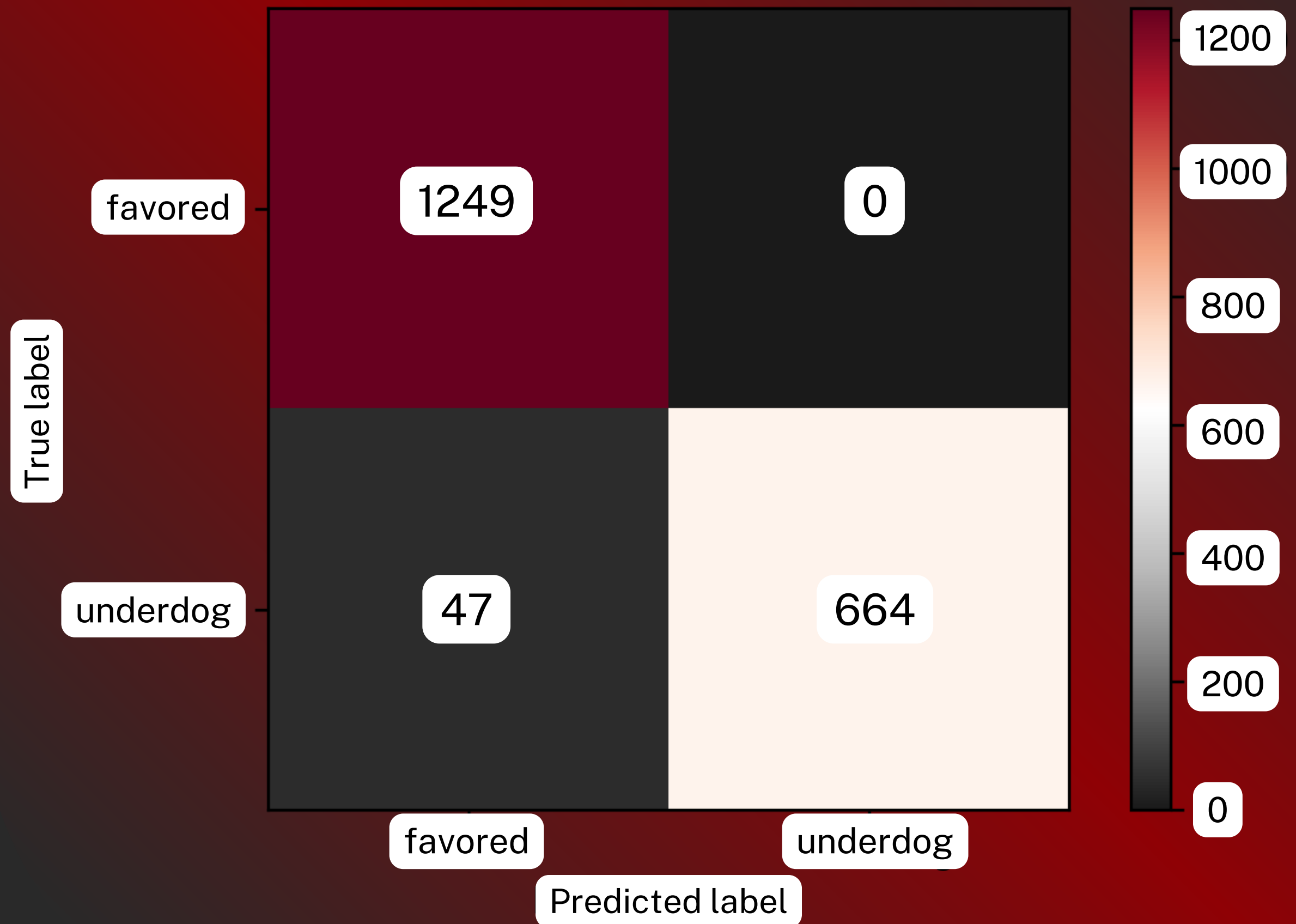
Data Preparation

- Create new columns
- Change 'winner' column
- Delete columns
- Manage null values

Methods

- Random forest
- Logistic regression
- Gradient boosting
- Neural network
- Stacking classifier

Gradient Boosting Classifier





100%

Precision on training data

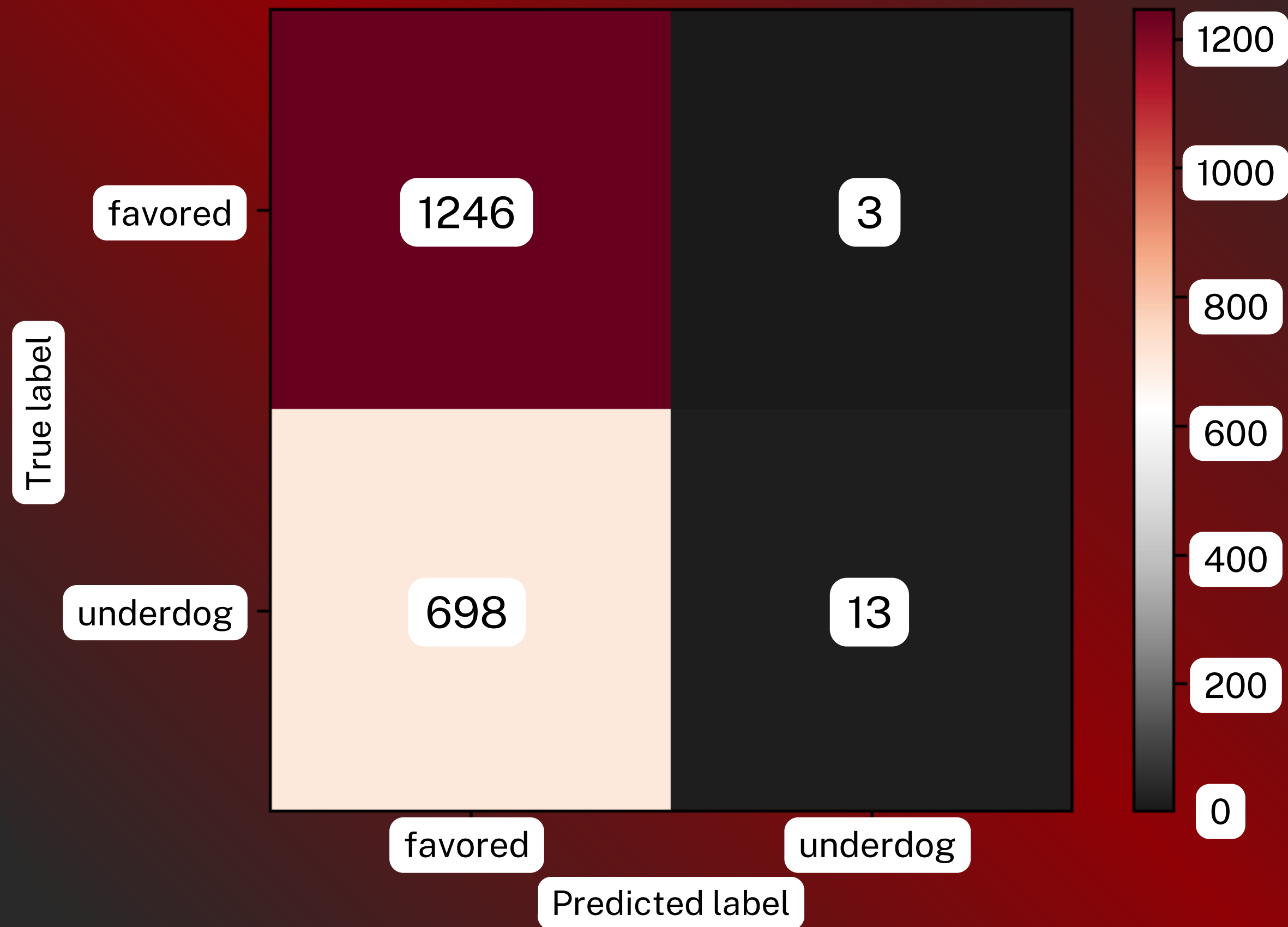
48%

Precision on cross validation

~33%

Of predictions are underdogs

Neural Network





81%

Precision on training data

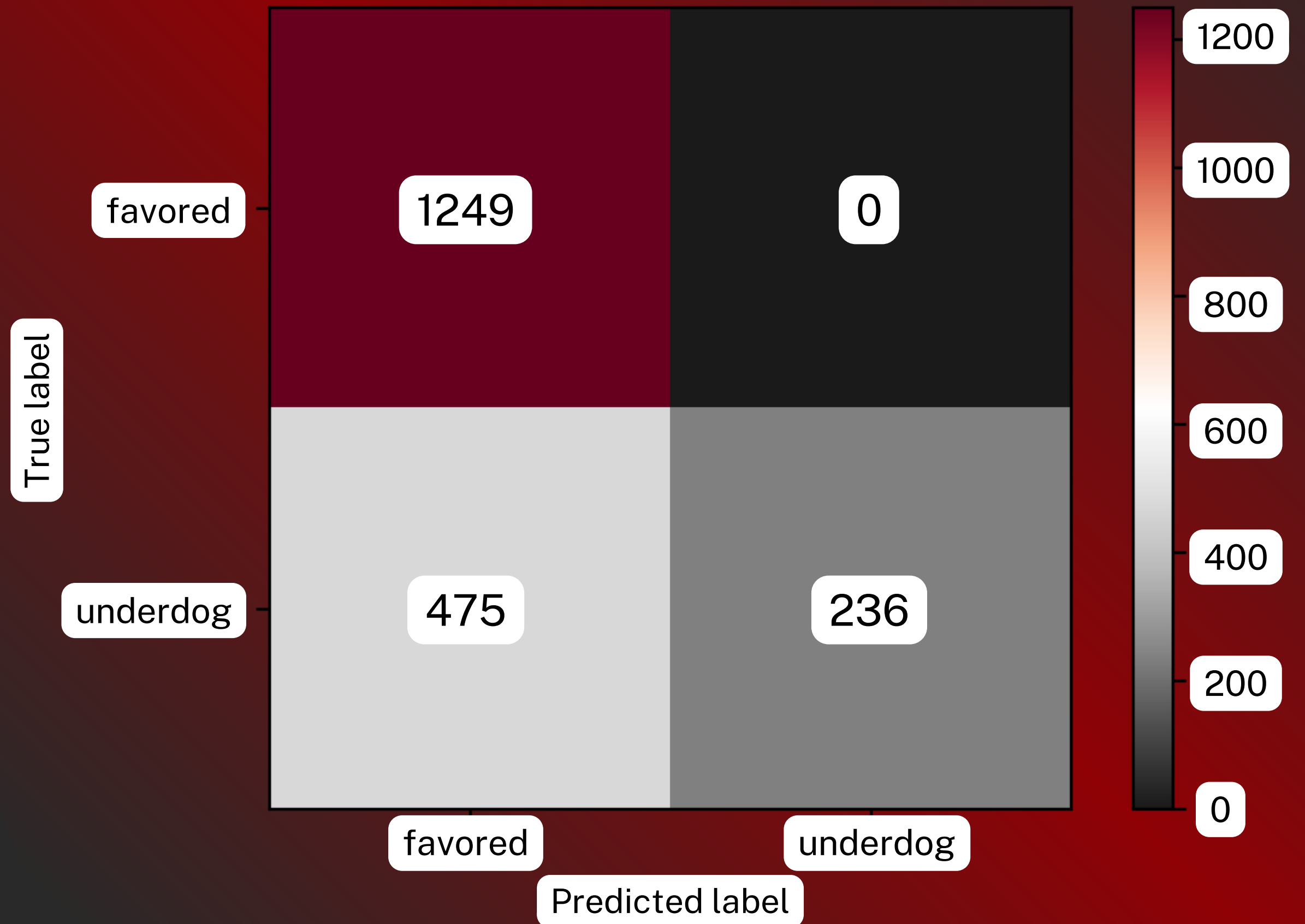
80%

Precision on cross validation

~0.8%

Of predictions are underdogs

Stacking Classifier





100%

Precision on training data

65%

Precision on cross validation

~19%

Of predictions are underdogs



65%

Precision on cross validation

75%

Precision on testing data

~1.2%

Of predictions are underdogs

Conclusion

- Default threshold
- Custom threshold
- Profitable



Thank you!

If there are any questions please ask.