Predicting UFC Winners

About Me

Ben Gilbert

<u>LinkedIn</u>

<u>GitHub</u>



Business Problem

Overview

Data

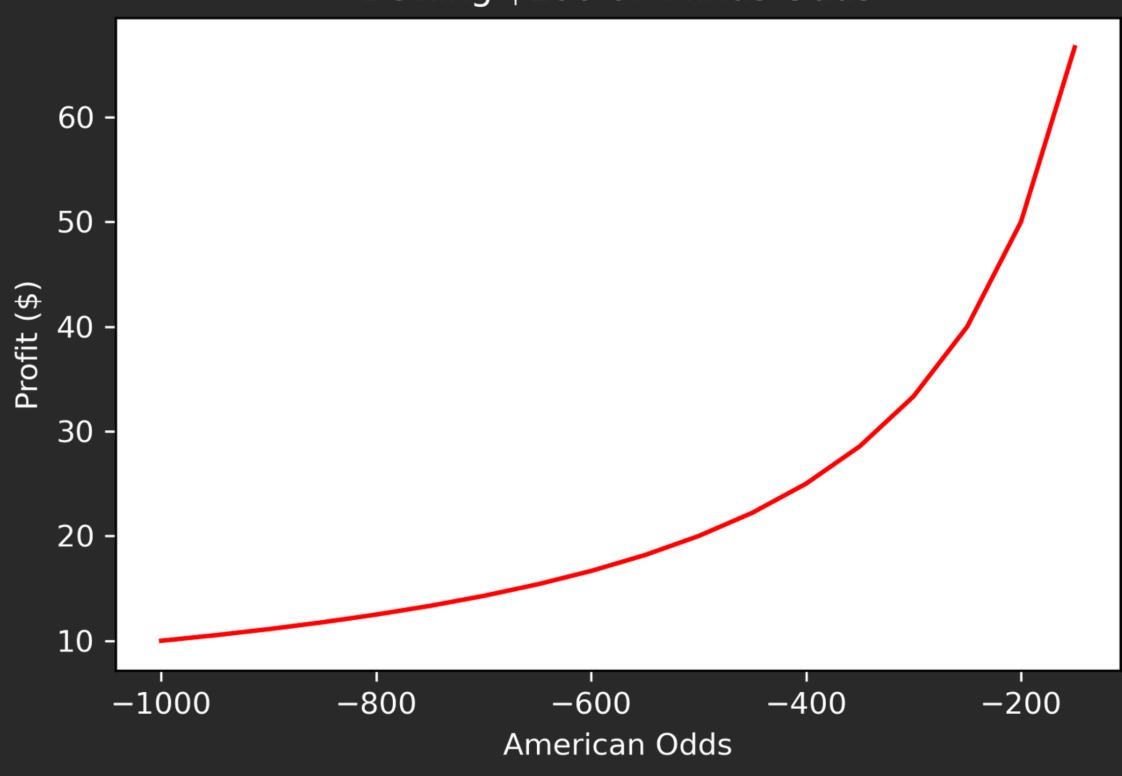
Methods & Models

Conclusion

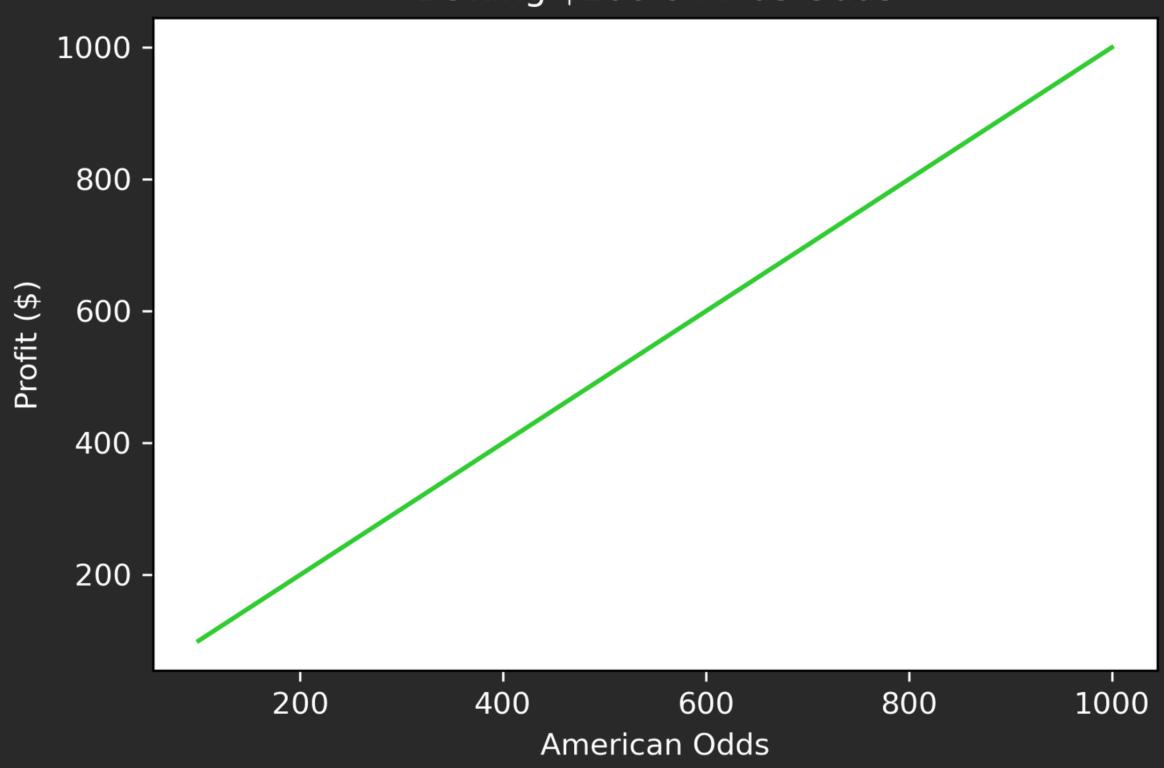
Business Problem

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

Betting \$100 on Minus Odds



Betting \$100 on Plus Odds



Israel Adesanya	-550 ▲
Sean Strickland	+410 ▼
Alexander Volkov	-238
Tai Tuivasa	+195 A
Austen Lane	+164 ▲
Justin Tafa	-198 ▼
Anton Turkalj	-122 ▲
Tyson Pedro	+102 ▼

Profit: \$410

Loss: \$100

Loss: \$100

Profit: \$102

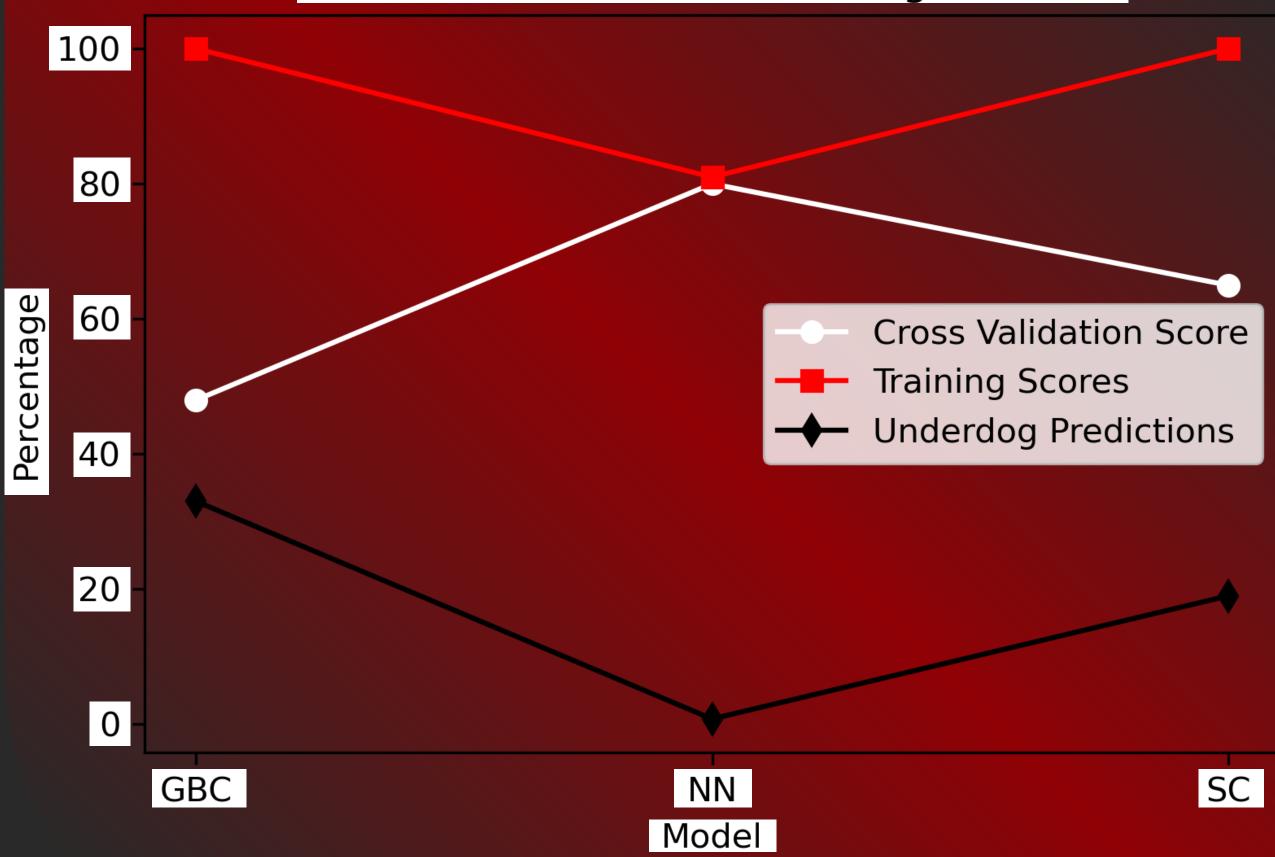
Total Profit: \$312

Data Preparation

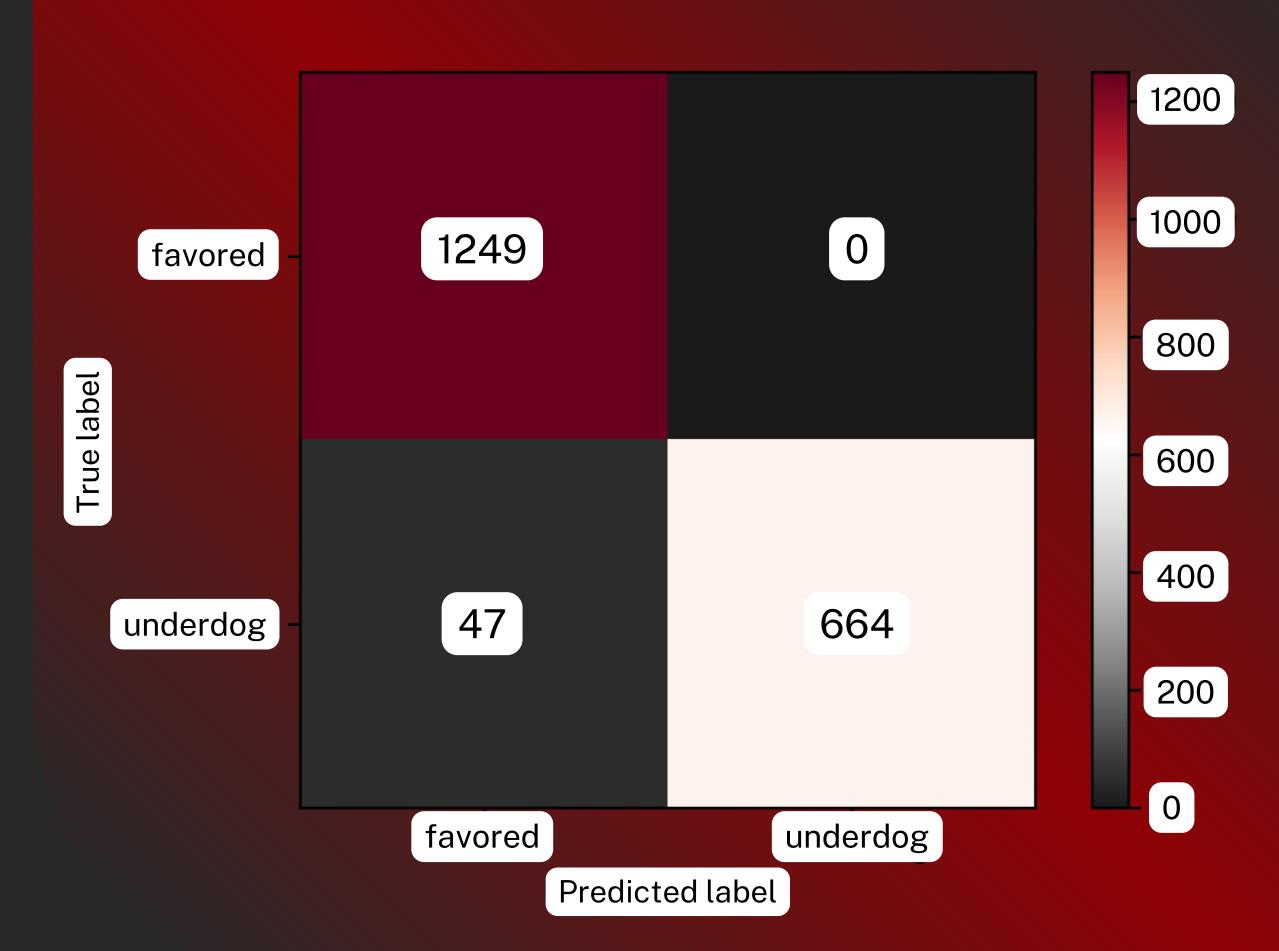
- Create new columns
- Change 'winner' column
- Delete columns
- Manage null values

GBC, Neural Network, Stacking Classifier





Gradient Boosting Classifier



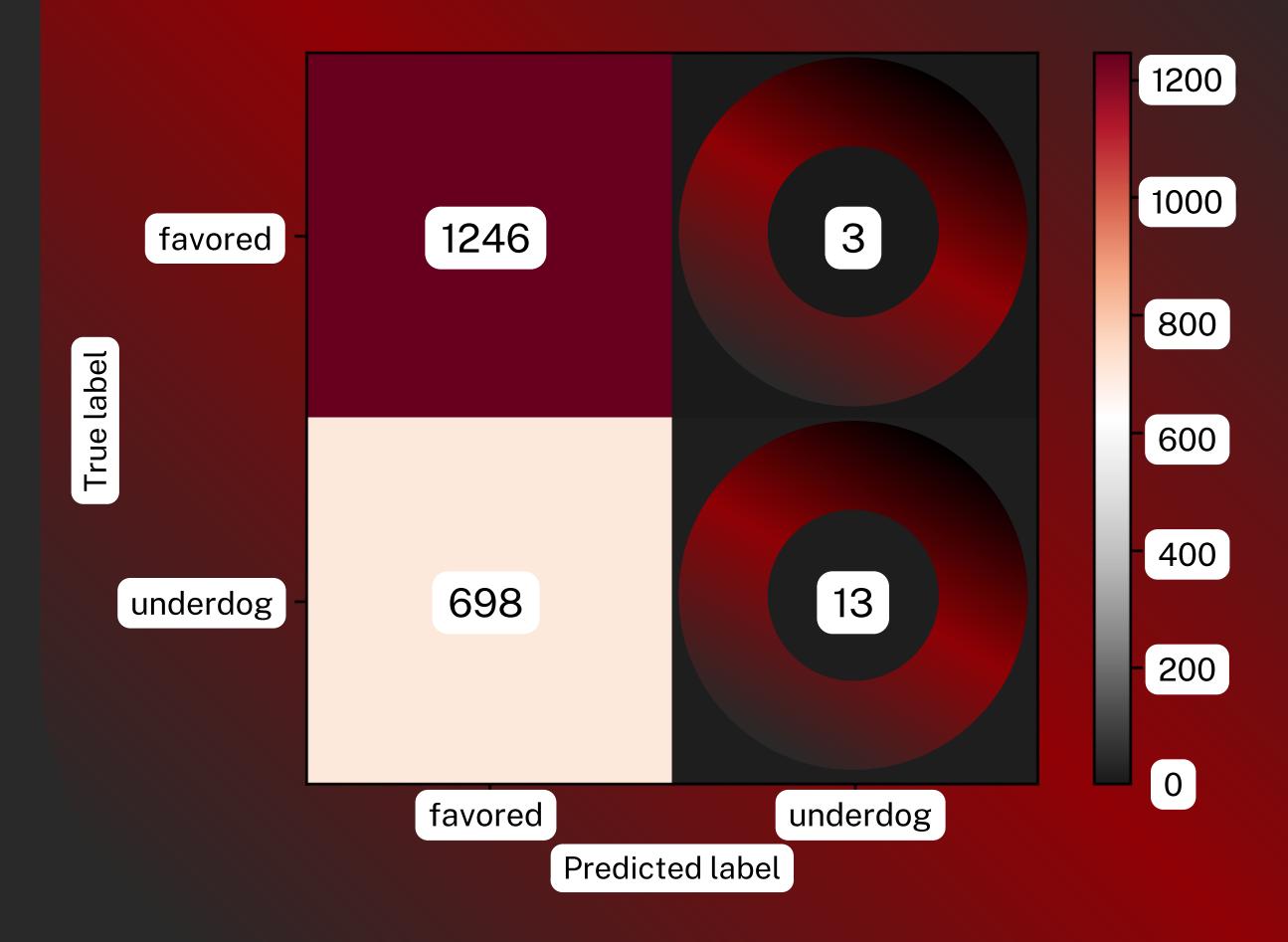
Precision on training data

48%

Precision on cross validation

~33%

Neural Network



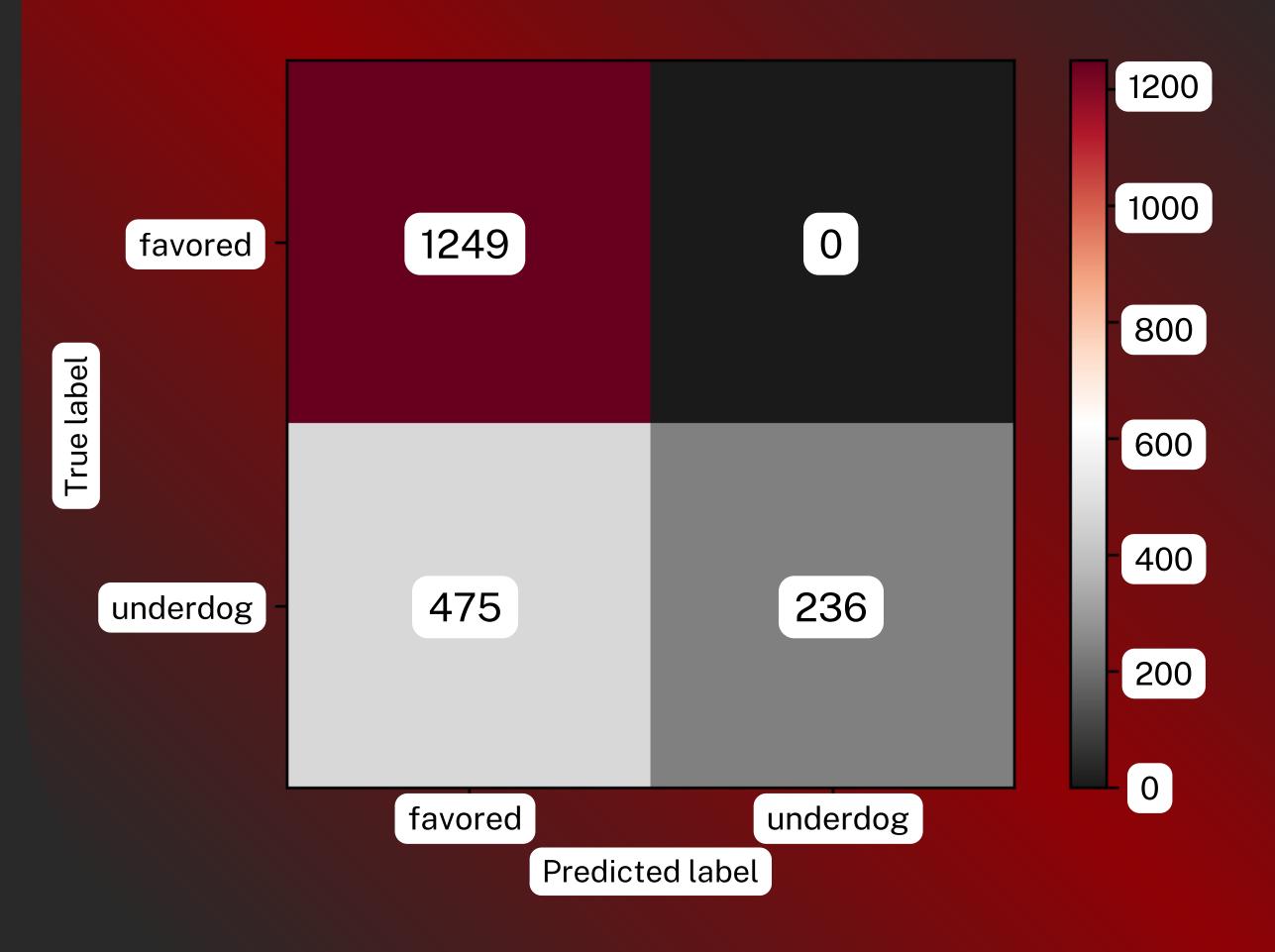
Precision on training data

80%

Precision on cross validation

~0.8%

Stacking Classifier



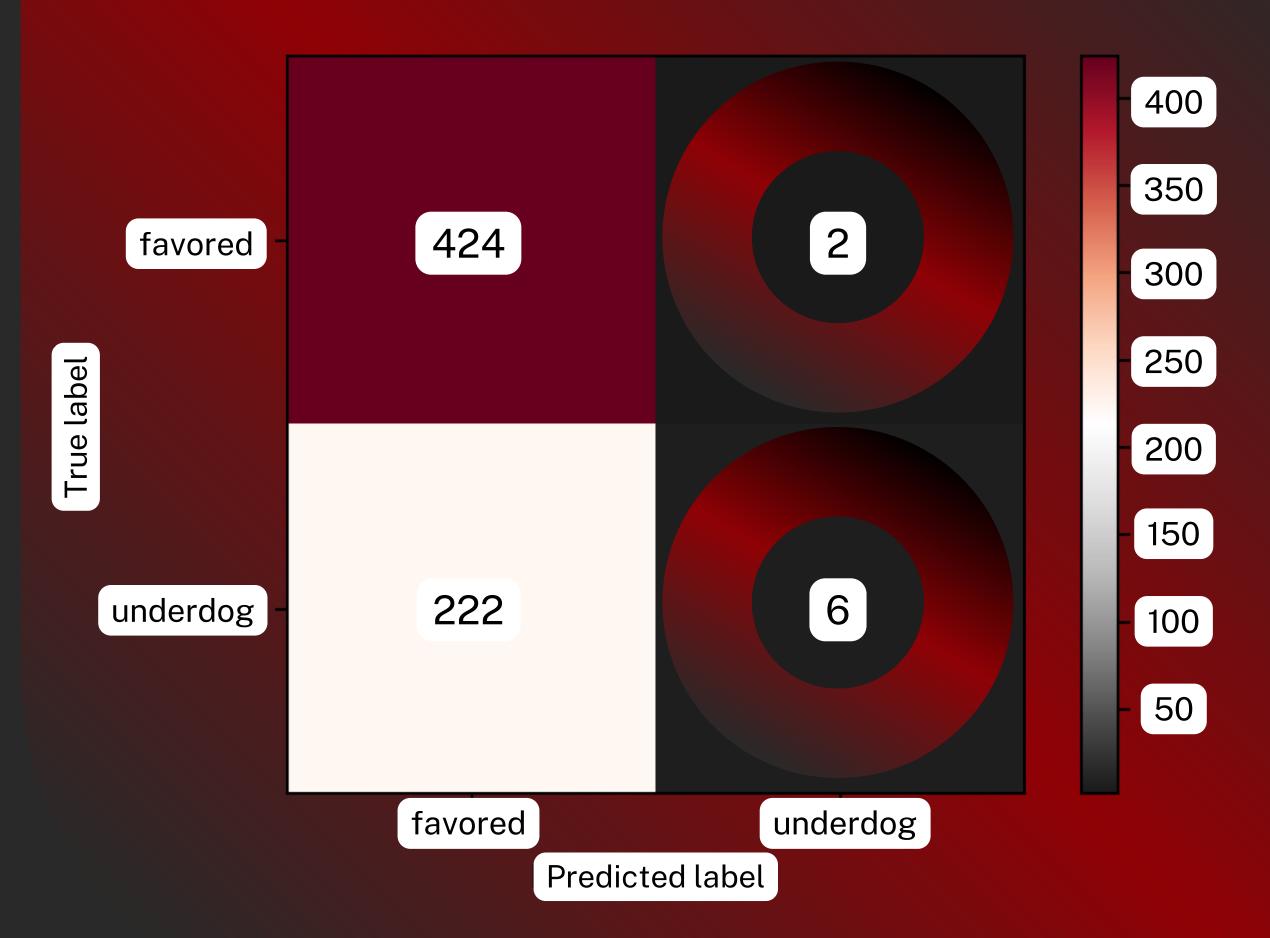
Precision on training data

65%

Precision on cross validation

~19%

Stacking Classifier (test data)



Precision on cross validation

75%

Precision on testing data

~1.2%

Conclusion

- High precision
- Rarely predicts underdogs
- Profitable

Next Steps

- Collect data
- Explore voting classifier
- Feature reduction

Thank you!

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