Betfair Dataset Analytics

Are There Correlations Between Winning Bets and Sports Types Location / Weather / Bet Types?

Sports Betting

Global market value (2023):

~$105B

Annual growth rate:

8.2%

Growth:

- Legalization in more countries
- Use of big data and analytics
- Mobile sports betting
- Development of new products and services

Bets:

- **Fixed-odds**: bets with bookmaker
- **Betting exchanges:** customers bet against each other

Betfair

- More advanced
- Largest Exchange
- **4 million** customers
- **$6B/week**

betfair

Betfair Dataset

- One Weeks Worth From Early September 2014
- 321 MB uncompressed file with 1.3 Million Data Rows
- 16 Features
- 23 Sports Taking Place Across The Globe

kaggle

betfair

Data Cleaning/Transformation

1.3M
15 cols

drop na
6 Sports
+2 columns

1.0M
17 cols

extract games

2658
records

add location
weather

2658
records

Merge back In

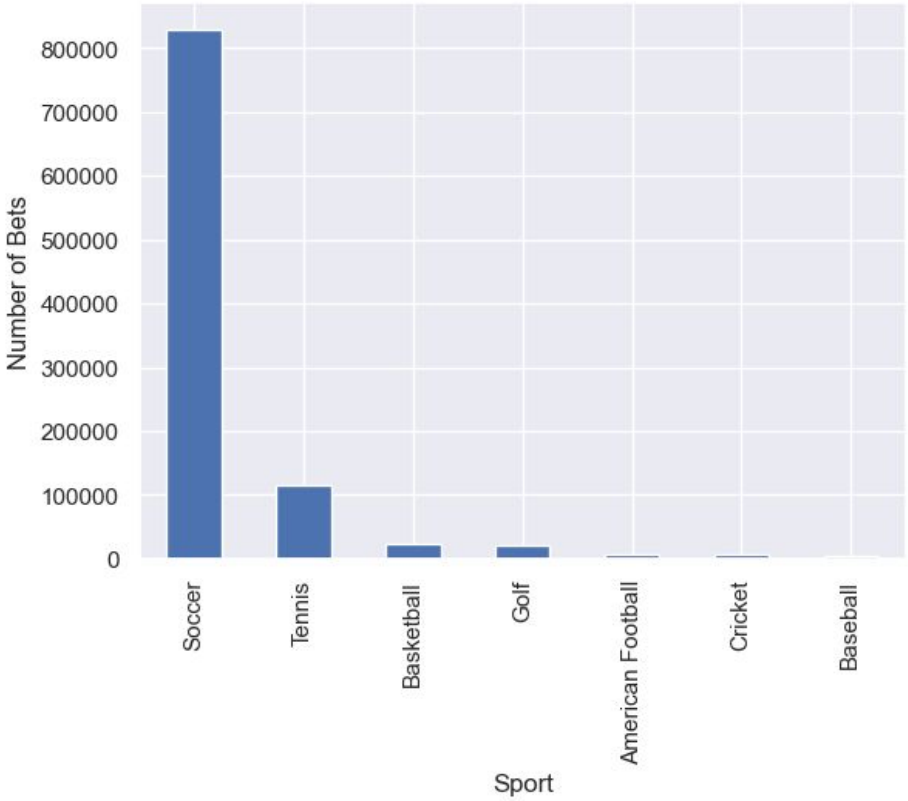
1.0M
23 cols

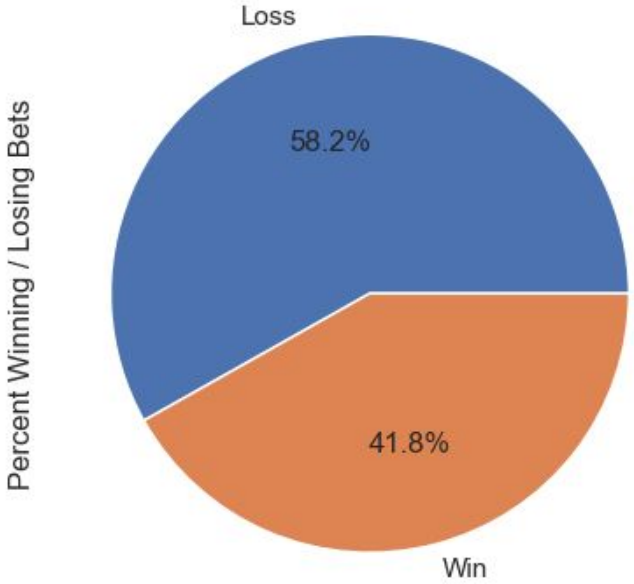
manually add
countries and cities

Geoapify

OpenMeteo

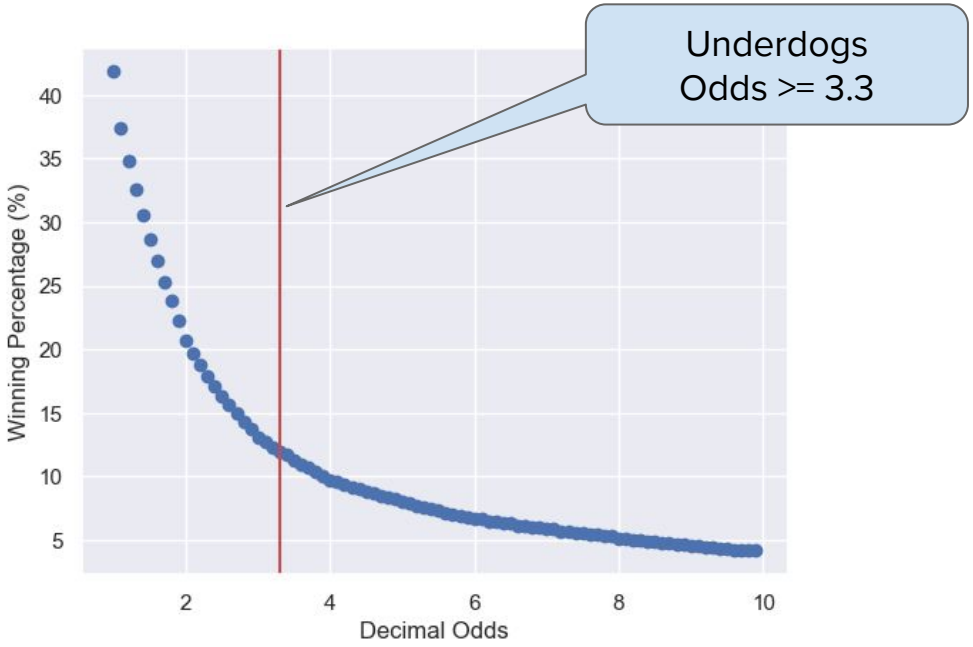
Data Overview

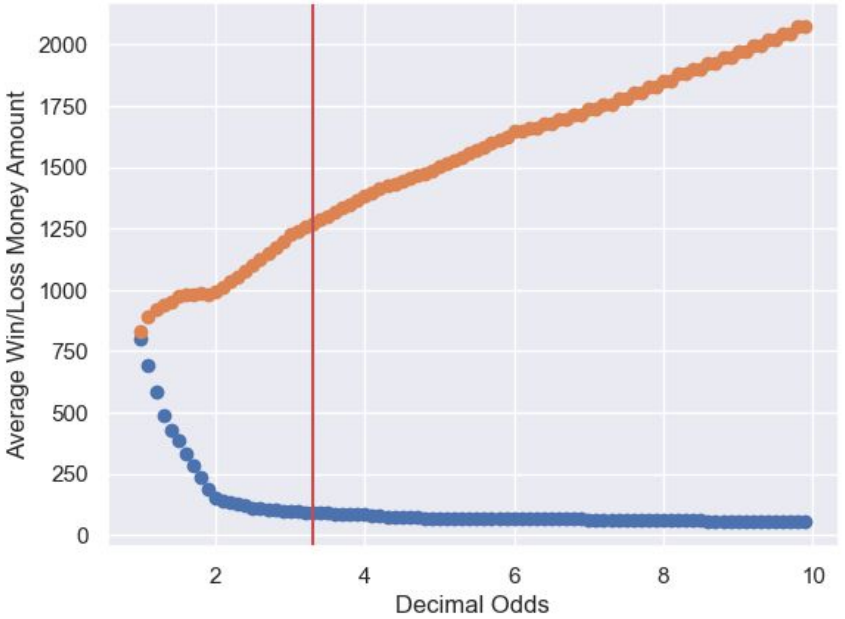




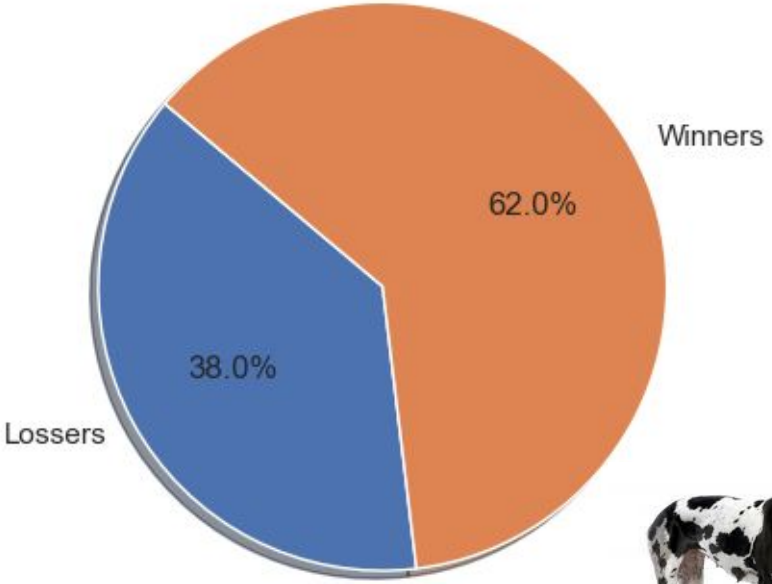
- Number of Games: **2658**
- Countries: **79**
- Number of Bets: **7.9M**
- Total Money Wagered: **$806M**
- Total Money Won: **$810M**
- Total Money Loss: **$838M**

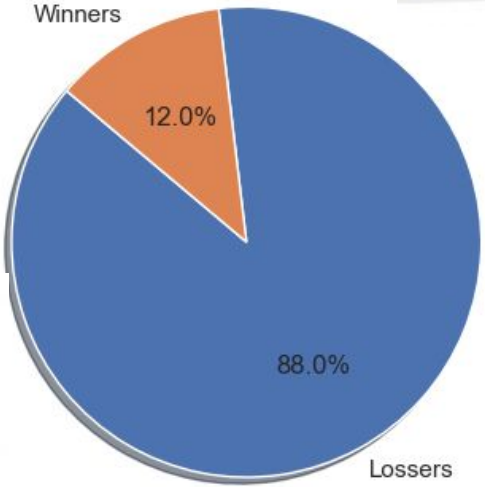
Winning vs Odds





Favorites vs Underdogs (odds > 3.3)





Why Bet On Underdogs?

STAKE (£)

100

ODDS

1.00

COMMISSION (%)

2

LIABILITY:	£0.00
COMMISSION:	£2.00
PROFIT:	£98.00
RETURN:	**£98.00**

STAKE (£)

100

ODDS

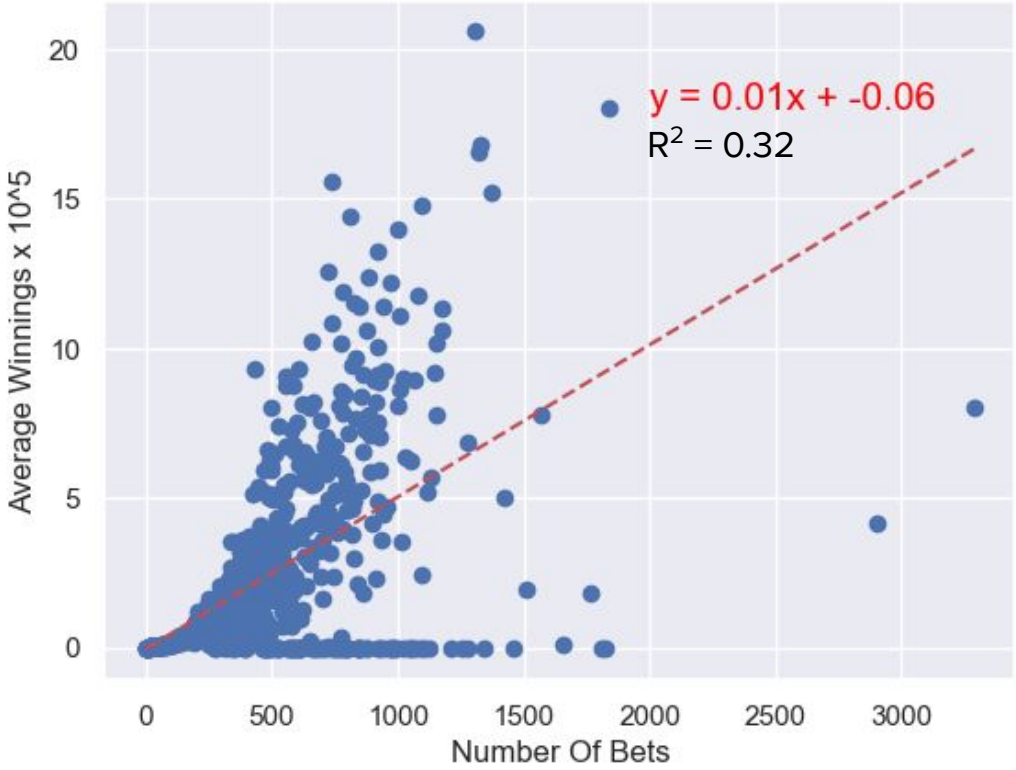
10

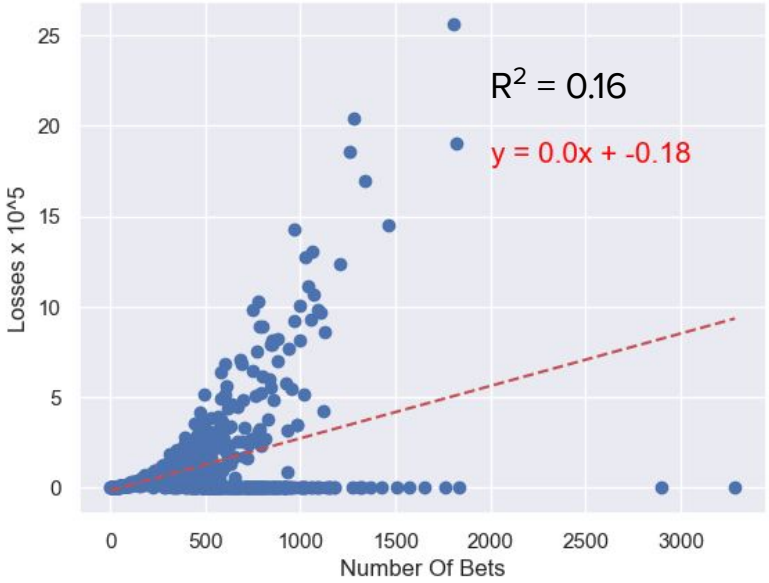
COMMISSION (%)

2

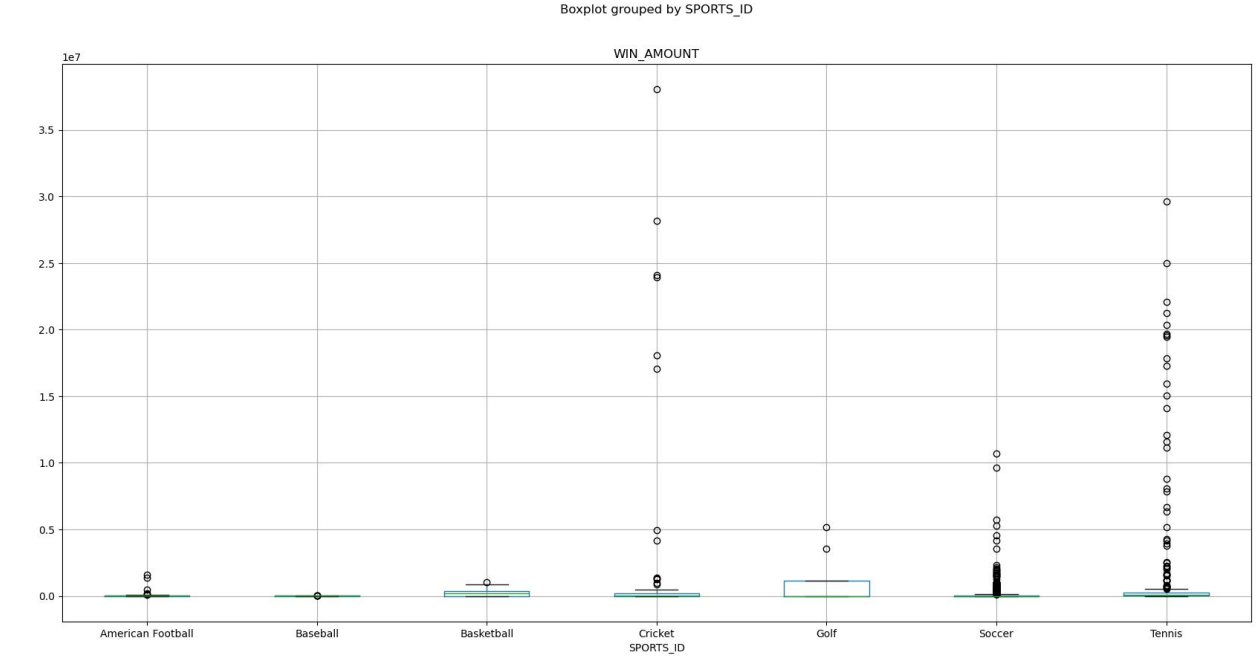
LIABILITY:	£900.00
COMMISSION:	£2.00
PROFIT:	£98.00
RETURN:	**£998.00**

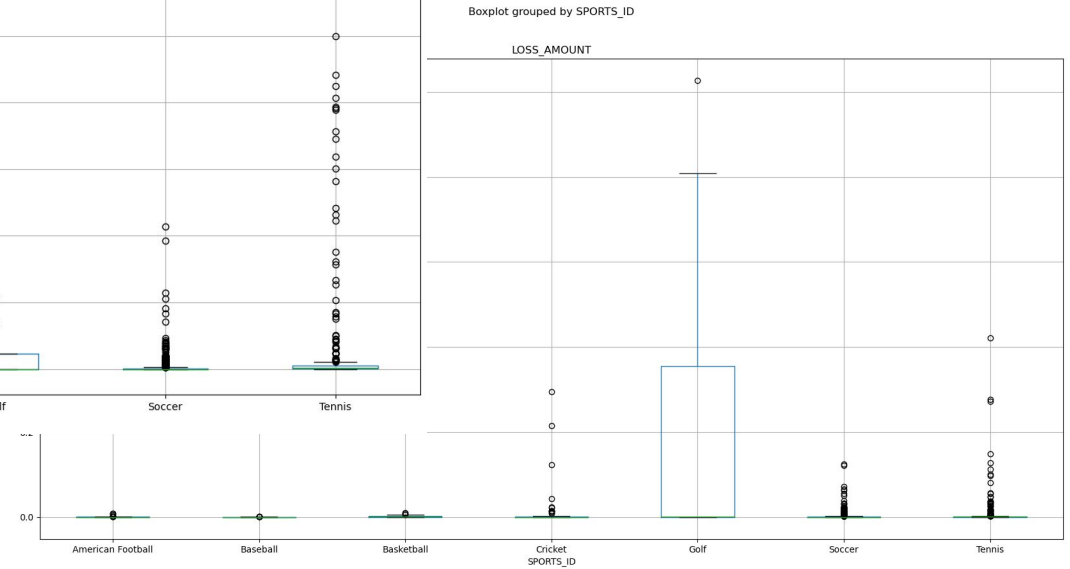
Number Of Bets vs Average Win/Loss





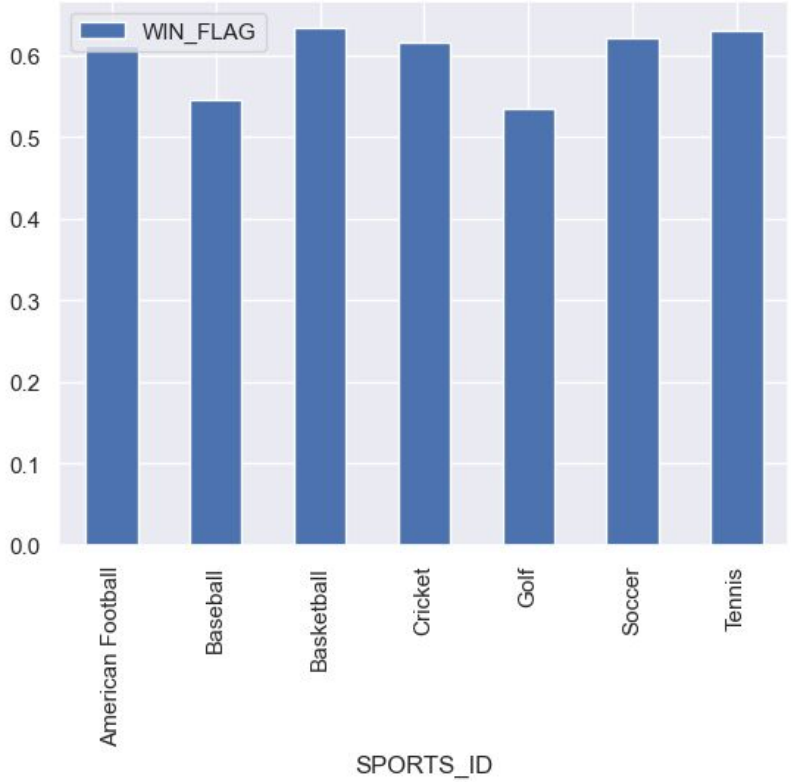
Sport Type Vs Win/Loss Amounts



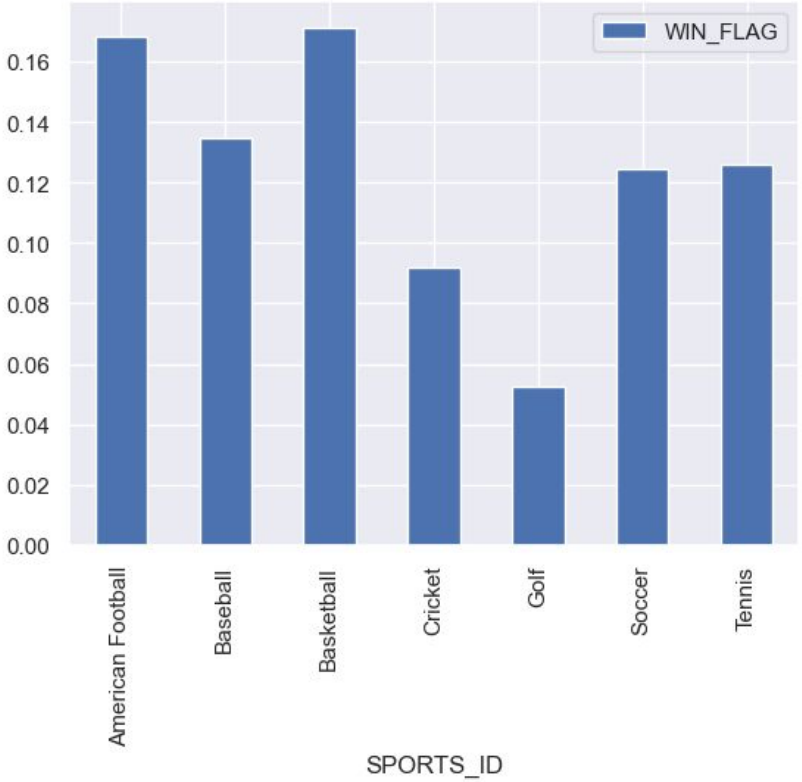


Sports vs Winners

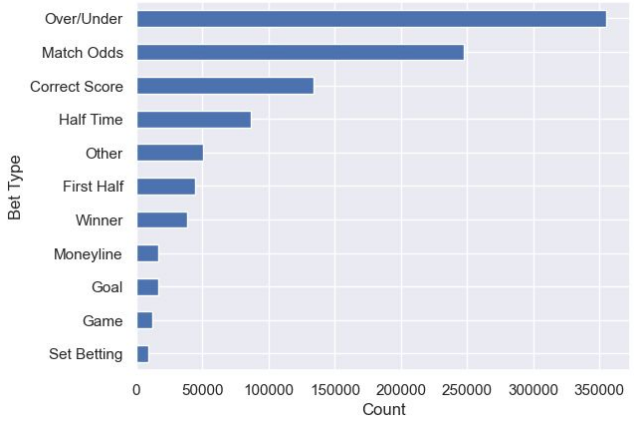
Favorites



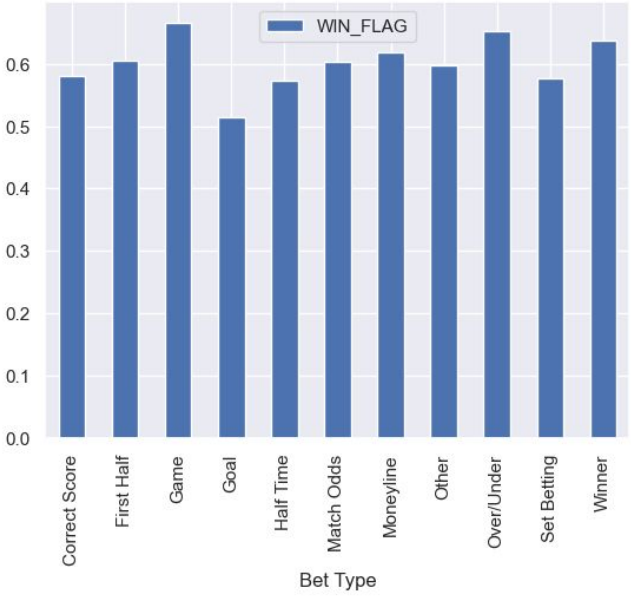
Underdogs



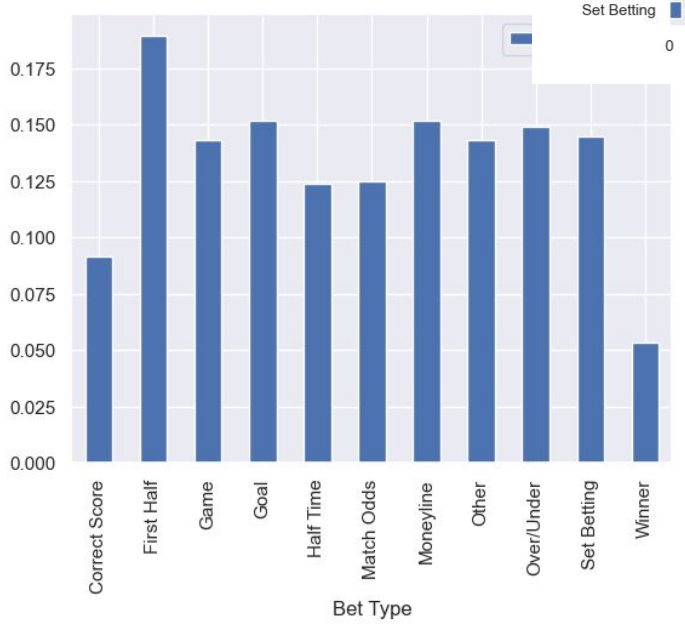
Bet Type vs Winners



Favorites

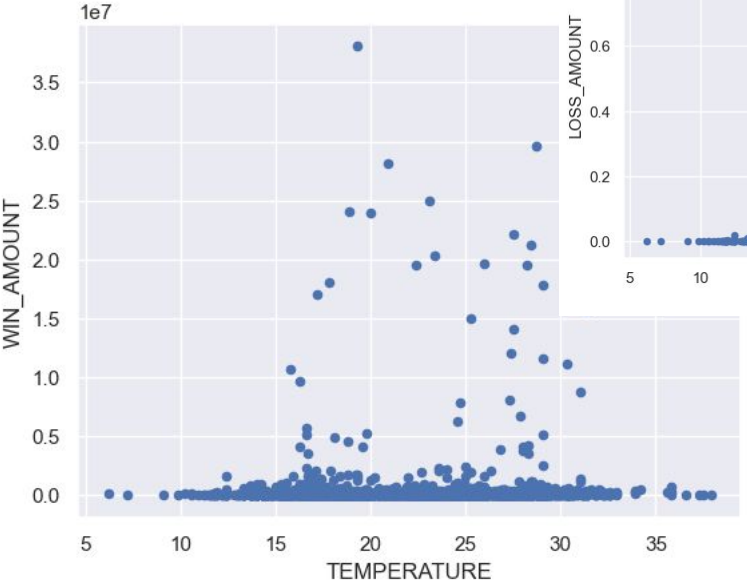


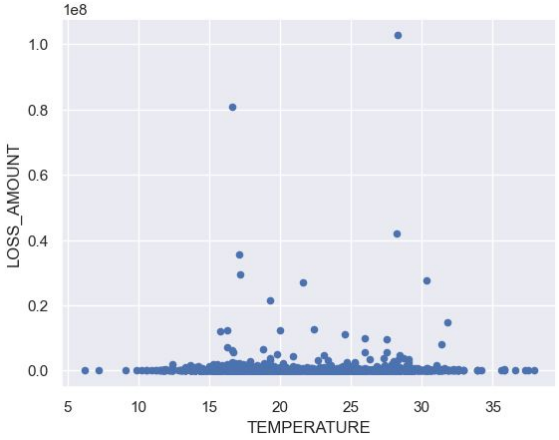
Underdogs

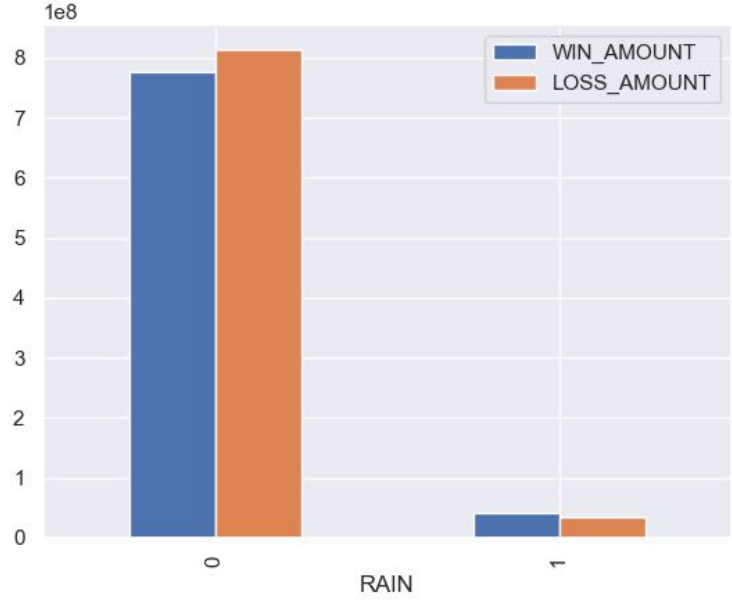


Weather vs Winning/Losing

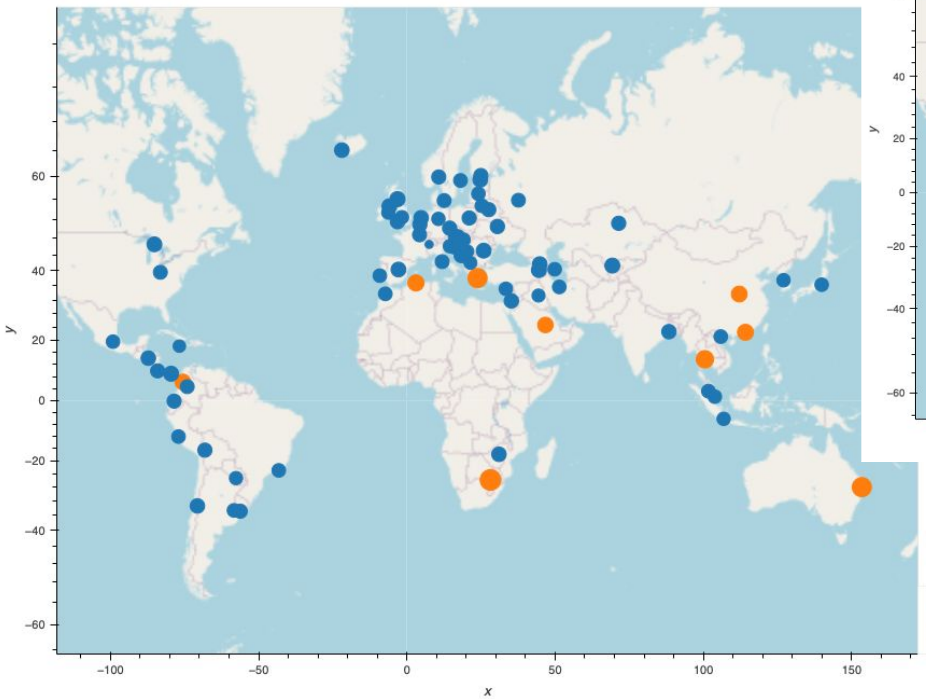
No Correlation!

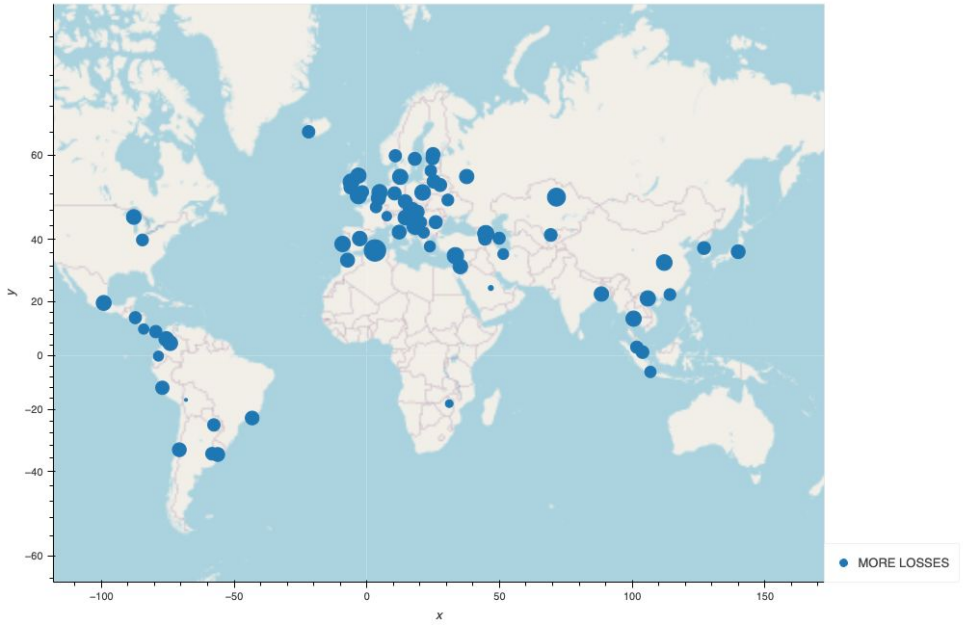




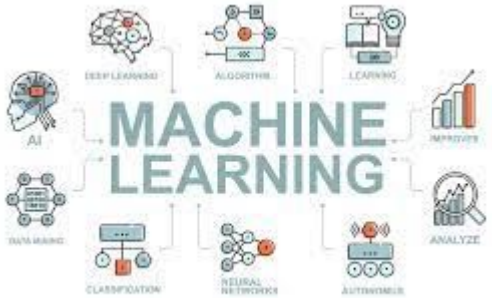


Location Affect?





Underdogs

Conclusion

- Underdog Bets Are Losing Propositions
- Statistical Significant Difference By Sports vs Money Won/Lossed
- No Correlation between Weather/Location To Increase Chance of Winning Underdog Bets
- Need Bigger/More Recent Datasets and Machine Learning Models