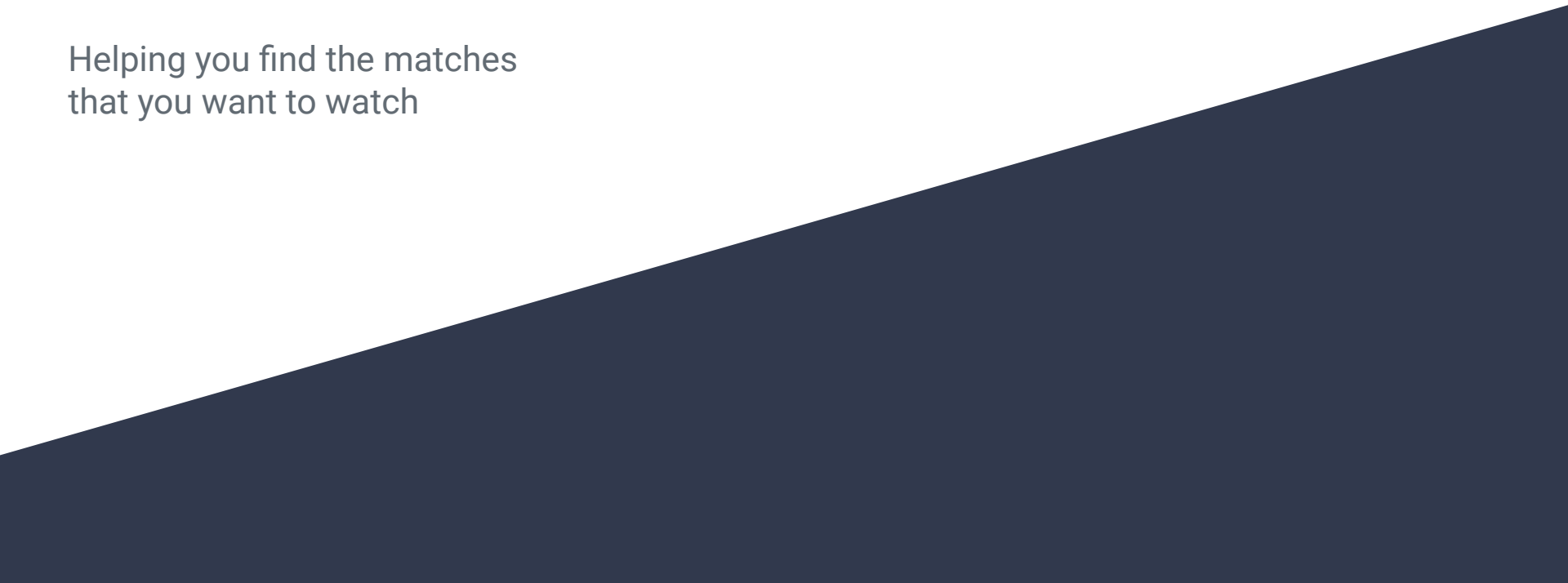


MMA Match Finder

Helping you find the matches
that you want to watch

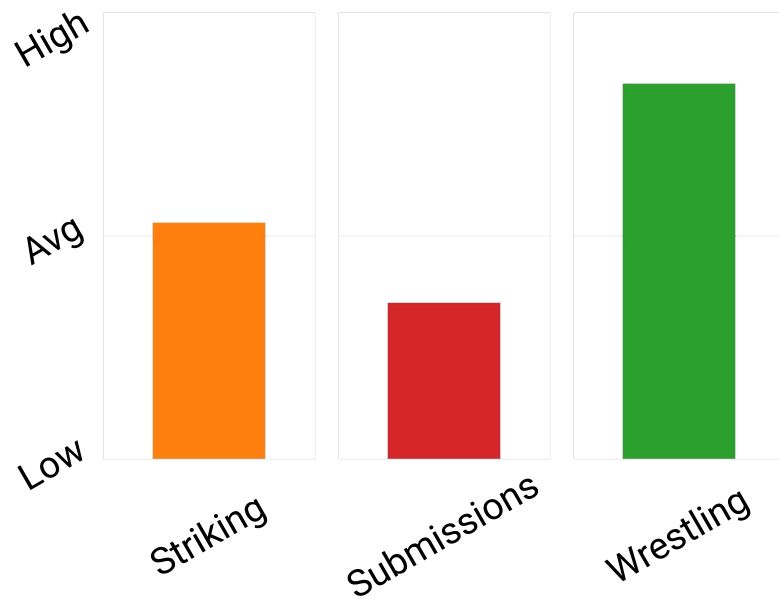
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Goal

Khabib
Nurmagomedov



Expected Techniques



Conor
McGregor



Objective 1

1. Predict Significant Strike Attempts per Minute
 - a. Create metrics that measure a fighter's:
 - i. Personal style
 - ii. Reaction to opponent's style
 - iii. Capabilities and potential

Methodology: CRISP-DM

Emphasis:

- Research
- Feature Engineering



Data Preparation

Example Row

Fighter 1 Stat	Fighter 2 Stat	Target
10.33	16.33	32.50

- Approximately 4,000 bouts
- Two fighters per bout, each fighter has their own stats
- Predictions are made using only the previous bouts

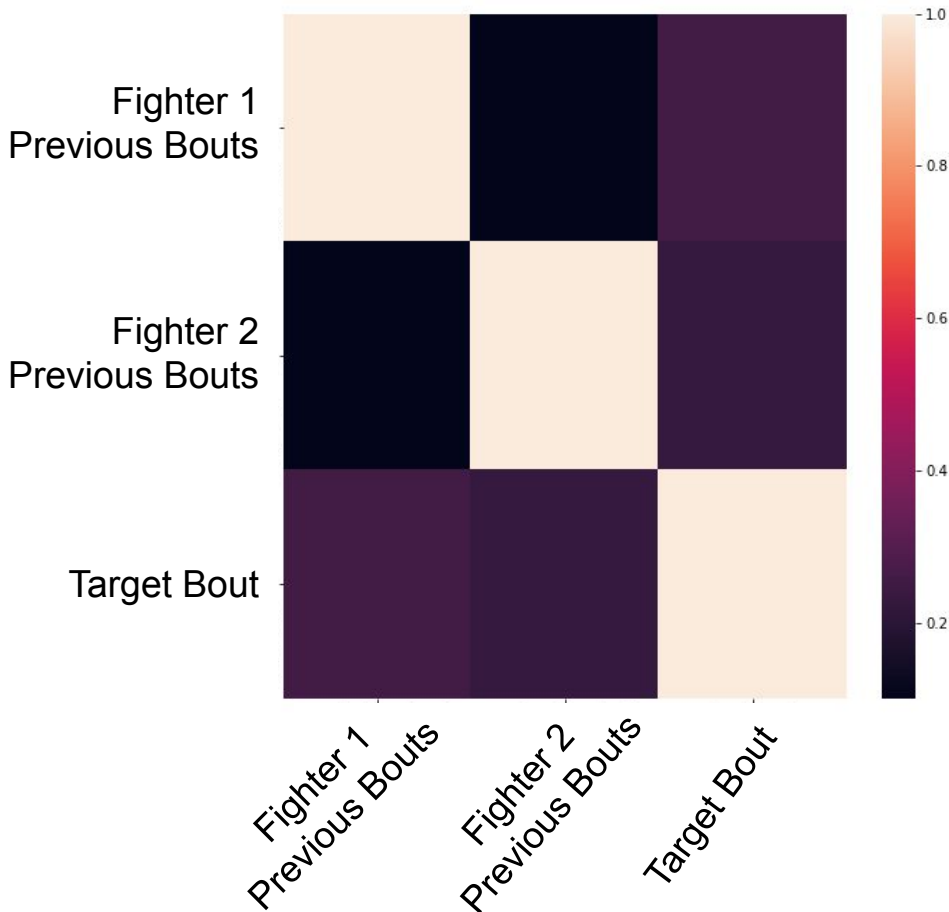
Current Features Lack Predictive Ability

Best Model:

Poisson Regressor

- Trained on Grappling and Striking Statistics
- R-squared: 0.128
- Poisson-Deviance: 0.143

Correlation Between Past
and Present Performance



Next Steps:

Develop Features that:

- Measure how a fighter performs relative to his weight class and age
- Categorize fighters based on their fighting styles
- Measure how a fighter responds to their opponents strengths

Thank You

-Maximilian Esterhammer-Fic

mesterhammerfic@gmail.com

github.com/mesterhammerfic

Appendix

Target Selection

Award Winning Fights:

Chan Sung Jung

- 8 out of 10 UFC fights

Ronda Rousey

- 6 out of 8 UFC fights

Paulo Costa

- 3 out of 5 UFC fights

Career Average Significant Strike Attempts per 1 Minute

Top 1%

Todd Duffee	20.552749
Martin Bravo	18.751218
Leslie Smith	18.645414
Ronda Rousey	18.316534
Weili Zhang	16.833255
Ryan Janes	16.831328
Paulo Costa	16.801537
Marco Polo Reyes	16.691553
Sergei Pavlovich	15.979750
Xiaonan Yan	15.946667
Irene Aldana	15.873973
Chan Sung Jung	15.485653
Ion Cutelaba	15.471439
Shane Young	15.310714
Andy Enz	15.040394
Chris Cope	15.031646
Tim Credeur	14.880312
Cory Sandhagen	14.784528
Max Holloway	14.608947
Shane Burgos	14.454724

Feature Creation

Noteable Fighters:

Khabib Nurmagomedov

- Known as the best grappler of all time

Ronda Rousey

- 7 out of 10 fights were won by submission

Career Average Successful
Takedown Differential per 15 Min.

Top 1%

Merab Dvalishvili	8.333333
Gadzhimurad Antigulov	7.429470
Jake Rosholt	6.963419
Tatiana Suarez	6.788785
Ronda Rousey	6.487653
Curtis Blaydes	6.439129
Gregor Gillespie	6.251899
Jake O'Brien	5.683165
Murilo Bustamante	5.603226
Edmen Shahbazyan	5.583333
Jeremy Kennedy	5.179063
Bartosz Fabinski	5.148387
Khabib Nurmagomedov	5.143912
Zabit Magomedsharipov	5.098636
Corey Anderson	5.093446
Robert Sanchez	5.071803
Aaron Simpson	4.890756
Colby Covington	4.874457
Jordan Johnson	4.675325
Ramsey Nijem	4.616337