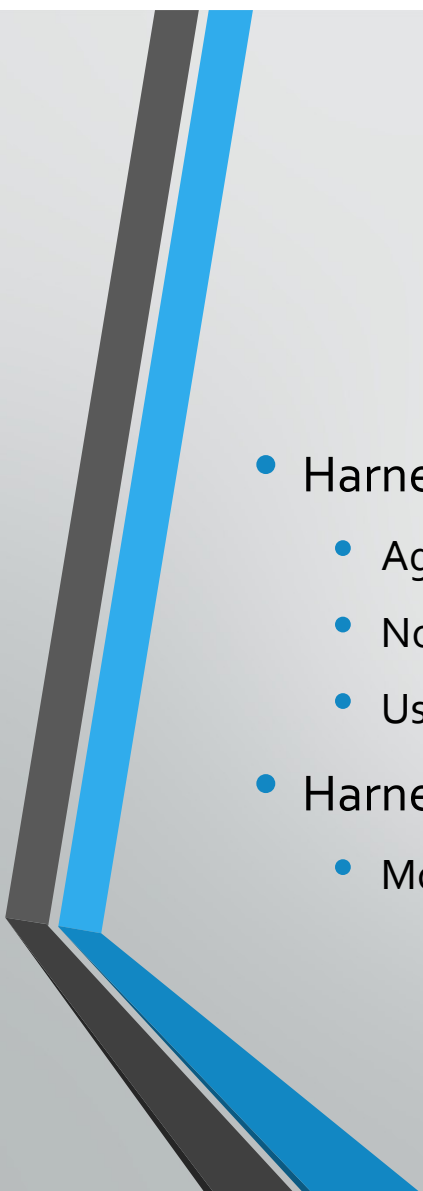# UFC
Fight Predictor

Developed By: Khanh Ho

Chaos, Mayhem...Data Science

- Take fight statistics like strikes, take downs, KOs and input them into a Machine Learning model to predict the outcome

- Little bias and purely technical analysis of the fights

A Few Technical Things

- Harnessing the power of the classic decision tree
    - Age of the fighter, number of strikes, number of take downs resulted in Decision Win
    - Now take the historical UFC fight data and see what the results were as **learnings**
    - Use that **learning** to help **predict future scenarios**
- Harnessing the power of statistics
    - Model fighter statistics using regression analysis

Model Inputs

- Fighter 1, Fighter 2, fight date

Model Outputs

- Fight Winner and Win Type

- High accuracy of winner

- Probability of each Win Type outcome

Accuracy Rating
Fighter Prediction is 86%
Decision Prediction is 84%
KO/TKO Prediction is 84%
Submission Prediction is 90%

Winner Prediction Accuracy

Weight Class	Accuracy
Flyweight	70%
Bantamweight	89%
Featherweight	86%
Lightweight	84%
Welterweight	87%
Middleweight	83%
Light Heavyweight	86%
Heavyweight	89%

Average of 84%