**Predicting NFL Wide Receiver Production using NFL Combine Data**

Preferred Presentation Dates: Friday February 2nd or Monday, February 5th

Research Question:

What impact does the NFL combine results have on wide receiver production in the National Football League?

General Summary:

We plan to use multiple linear regression for this analysis. Using a multi-year combine dataset (2000-2022) we hope to predict NFL receiver output in the 2022 season using a variety of controls and variables.

Relevant Articles:  
- [The NFL Combine - Does it Predict Performance? (2008)](https://journals.lww.com/nsca-jscr/Fulltext/2008/11000/The_NFL_Combine__Does_It_Predict_Performance_in.1.aspx)

* Includes response variables of salary, games played, draft order, yards per reception
* Data from 1999-2002

- [The Relationship Between Combine and Game Performance](https://journals.lww.com/nsca-jscr/Fulltext/2020/09000/The_Relationship_Between_the_National_Football.12.aspx?context=FeaturedArticles&collectionId=1)

* Response = average snaps played over 5 year period

Response Variable:

* EITHER fantasy points (as a general measure of NFL Production) or some other measure of yards, games played, receptions, or touchdowns
  + Fantasy points is a strong approximation of receiver production

Independent variables:

* Athlete height
* Athlete weight
* 40 Yard Dash time
* Vertical Jump height
* Bench Press reps
* Broad Jump distance
* 3 Cone time
* Shuttle time

Other Controls:

* Team (to control for quality of offense)
* Years removed since combine
  + We would expect athleticism to be **less** important if a player has had a longer career
* Games Played (to control for injuries or missed time)

Data Source:

* [Fantasy Pros](https://www.fantasypros.com/nfl/stats/wr.php?scoring=HALF&year=2022)
* [Kaggle](https://www.kaggle.com/datasets/mitchellweg1/nfl-combine-results-dataset-2000-2022/data)