**Objectives**

Football is an ideal place to practice deploying mathematically derived observations and advanced data science techniques. 2022 was an incredible year for football and I thought it would be fun to work on a project related to receiving statistics from the 2022 season.

**Conclusions**

After examining the data and doing a bit of research, I learned that Justin Jefferson, the player with the best statistics from 2022, had the 6th best receiving season of all time. I wanted to find visualizations that really show how much he distanced himself from the rest of the players, plotting yards against targets one can easily determine which data point is his, (the highest in targets AND total yards) Of the 508 qualifying players (to qualify, a player of any position needs to have been targeted with a pass at least once), Jefferson’s transcendence is obvious.

Chart, scatter chart

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Math frequently provides us the opportunity to elegantly describe situations and make new realizations. The player who had the lowest yard total for the season had -10 yards and Jefferson, who was the leader, had 1809 yards. The histogram elucidates how remarkable his achievement was, here, we find that the vast majority of qualifying players caught less than 250 yards (almost 300 players), and were targeted less than 25 times. Clearly, there is a very strong positive correlation between targets and yard total and Jefferson’s outlier status clearly illustrates this positive correlation since he had the most yards and the most targets.

**Github link**

**Api Documentation**

Python: https://docs.python.org/3/library/

Beautiful soup api: <https://beautiful-soup-4.readthedocs.io/en/latest/>

Pandas api: <https://pandas.pydata.org/docs/reference/index.html>

Matplotlib api: <https://matplotlib.org/stable/api/index.html>

Seaborn api: <https://seaborn.pydata.org/api.html>

Requests api: <https://requests.readthedocs.io/en/latest/>

**Data Dictionary**

**Table

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