In my visualization I was interested in determining how many wins a team in the NCAA championship will average get before winning the NCAA tournament. Part of the reason this interest me is how close Oregon State got to winning and if this could help our chances in the future, and that my mother went to Gonzaga, who have lost the championship twice in the last few years.

The easiest dataset I found to work with provided the losing and winning team from each game between the years 1985-2016, as well as what round the game was in. With this data I created a python script that creates an object for each team adding up the teams record and concludes by printing out each team's wins, loss and championship wins and loss, into an excel spreadsheet. Here is the GitHub repo if you want to check it out.

Figure 1

I first graphed how win percentage and championship wins was related but realized just going off of win percentage does not consider the total number of games the team has played. Teams like Loyola, Illinois had over a 60% win percentage but only played a total of 3 games, so there was no chance for them to win the champion ship. (6 total wins is needed)

Figure 2

The next plot was using total wins instead of win percentage. This shows that averagely a team with one championship win averages 37.8 total wins. The lowest number of wins for a championship winner is 24 wins regular and 35 wins is the most a team has without winning the championship. This shows that Gonzaga with 24 wins would be tied for the team with least wins if they had won the championship in our data set and would need to win another 12 games without a championship to have the most wins without one. If my data set covered more recent data I could see them taking Oklahoma spot for the most wins without a championship, since they have lost in the championship game twice in the last 4 years giving them at least 5 wins each year to make it that far.

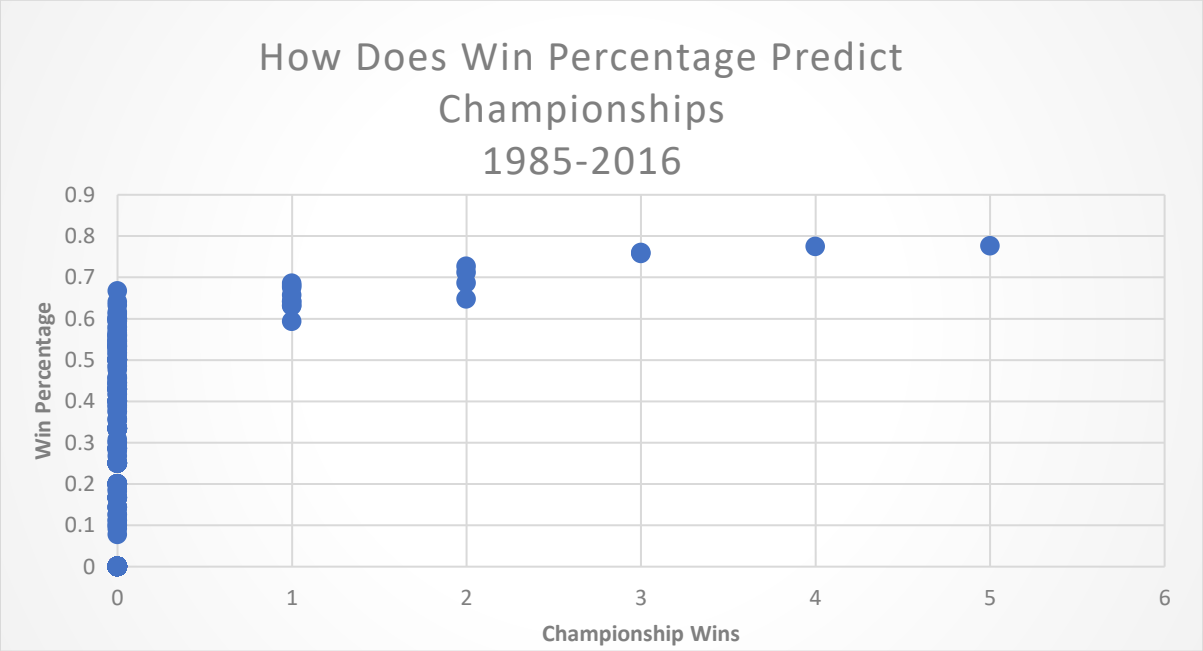
Figure 3

The next figure shows the top 30 teams and their overall wins (championship and otherwise). Of the top 30 teams only 17 have won the championship at least once. This graphic highlights teams like Oklahoma and Connecticut. Oklahoma has won no championships while winning 35 games while Connecticut has only 15 more wins, but a total of 4 championship wins.

Figure 4, 5

The final two graphics are a visual representation of the total wins and championship wins each team has. I thought this graphic appropriately represented the data since larger win totals would take up more area on the display.

Figure 1

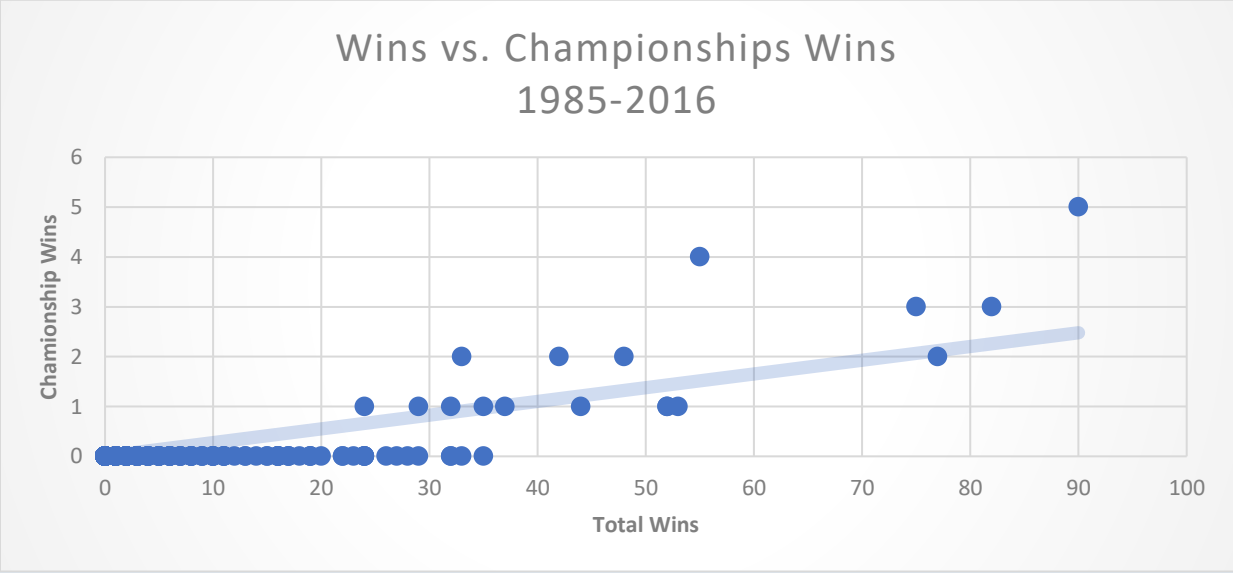


This scatterplot shows us that win percentage affects the likelihood of winning the championship but does not ensure it.

Standout Teams from this plot.

- Duke: with the best win percentage, most wins overall and most championship wins. (77.6%, 90 ,5)
- Loyola, Illinois: with the best win percentage without a championship from 1985 to 2016. (66.7%)
- Indiana: with the worst win percentage while still winning a championship. (59.3%)

Figure 2



From here I decide to use total wins instead of win percentage since it now considers the total games played.

Standout Teams from this plot.

- Oklahoma: Most wins without a championship. (35)
- Nevada-Las Vegas: Least wins with a championship. (24)

Interesting plot stats.

- 106 teams do not have a single win between 1985-2016(including Oregon state), with Iona having it the worst with 8 losses and no wins in that period.
- Out 292 teams only 17 have won the championship over that 30 year period.
- Averaging every team's wins that have won a championship gives us 53.75, while each team that has won the championship once has an average win count of 37.8.
- The average win count for all 292 teams is 7.02

Figure 3

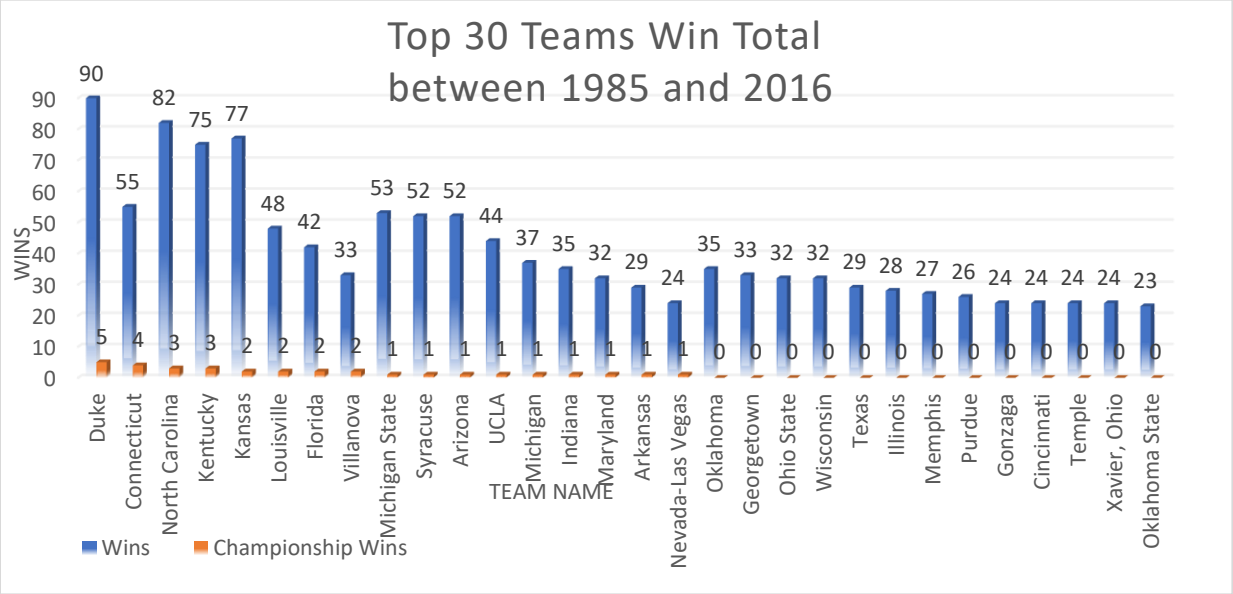
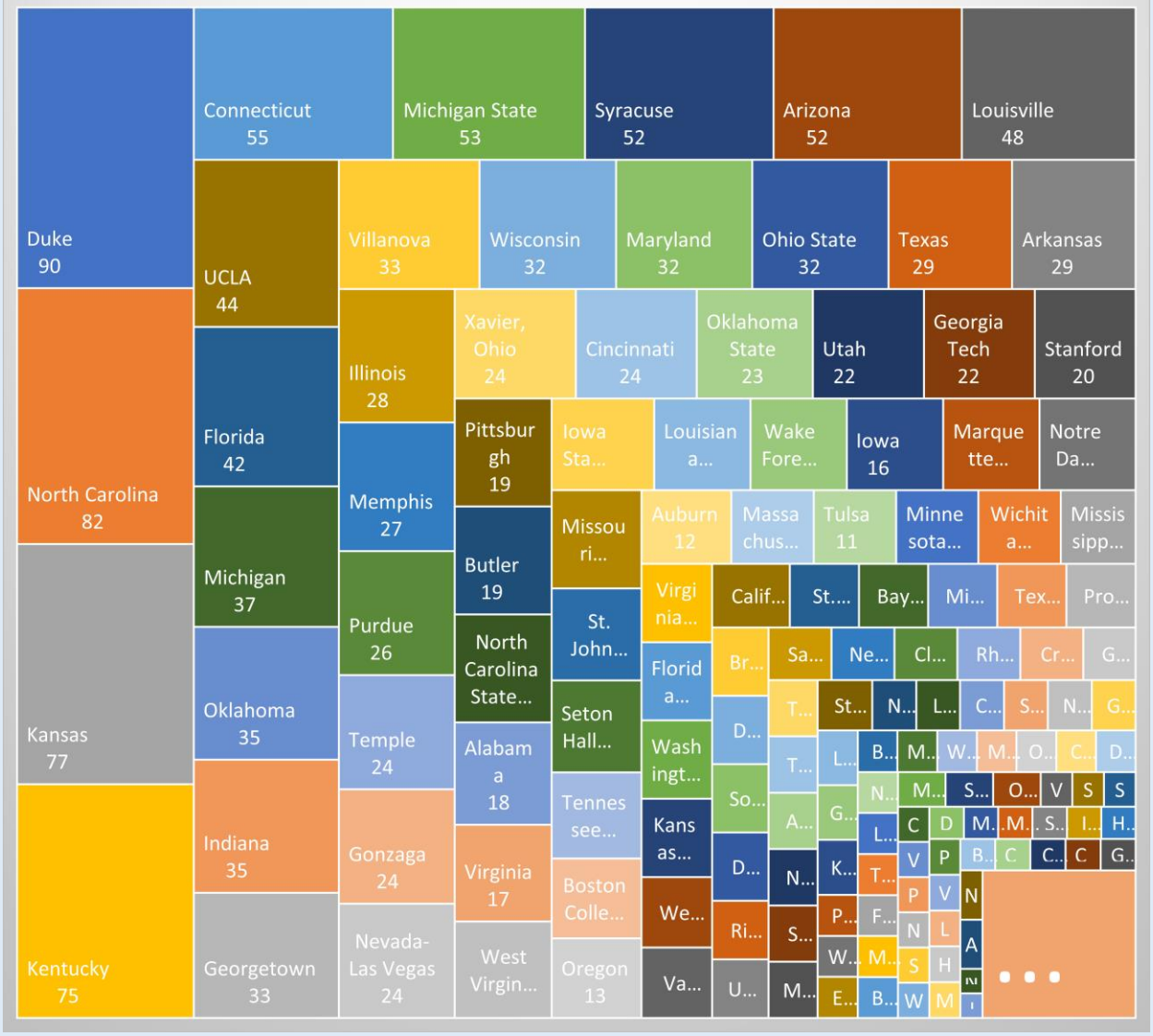


Figure 4, 5↓

NCAA Tournemant wins between 1985-2016



NCAA Tournemant Championship Wins 1985-2016