

FORECASTING PROFESSIONAL FOOTBALL GAMES

Background:

Thousands of people take to sports gambling every year to make their viewing experience more exciting, and to have a chance at making money doing so. Online sportsbooks allow bettors to place wagers on the outcomes of games, both which team will win outright, and whether a team will win by a specific margin, called “the line.”

A small group of investors called upon StrataQuant to develop an algorithm to forecast the outcome of NFL games.

The Challenge:

Sportsbooks make money by providing odds that require bettors to win more than half the time. This is referred to as “the vig” or “the juice.” For a point-spread wager, there is thought to be roughly a 50% chance of each team covering. However, due to “the vig,” bettors must win about 52.5% of the time just to break even. Thus, the edge must be significant enough to overcome this obstacle.

Additionally, most bettors are armed with the same information. StrataQuant could not rely on proprietary data to create more accurate forecasts. For a solution to provide significant edge to the investors, the publicly available data would have to be used more effectively.

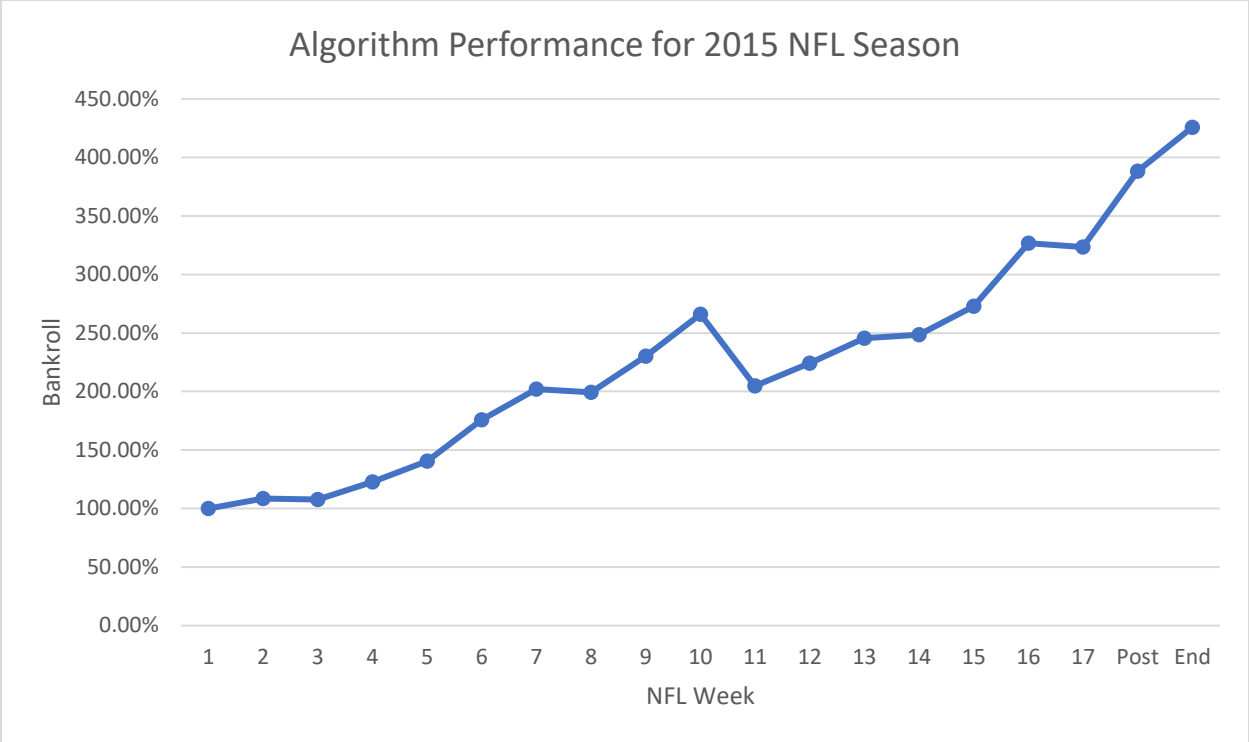
Methodology:

StrataQuant’s biggest challenge was to identify which data was relevant, then correctly implement that data into a model that would output a projected point spread for each matchup. The larger the difference between the forecasted point spread and the actual point spread, the more edge was theoretically present.

To accomplish this, Principal Component Analysis was performed on the independent variables to determine the data inputs that were most responsible for variances found in game outcomes. From historical data, logistic regression was then performed on these inputs to create a model that would produce a projected point spread.

Results:

According to publicly available data on professional handicappers, the StrataQuant algorithm was the best worldwide for the 2015 season. The week-to-week return on investment is displayed below:



NOTE: For bankroll management purposes, no more than 15% of the bankroll was risked on one particular matchup.

At the completion of the 2015 NFL Season, the algorithm had increased each investor's bankroll by **325.8%**, using a compounding model (as the bankroll increased, the recommended wager size increased).

Whether it's sports data or financial data, StrataQuant can find extraordinary edge in ordinary places.

Contact us to learn how we find edge in your market of interest to power your profits.