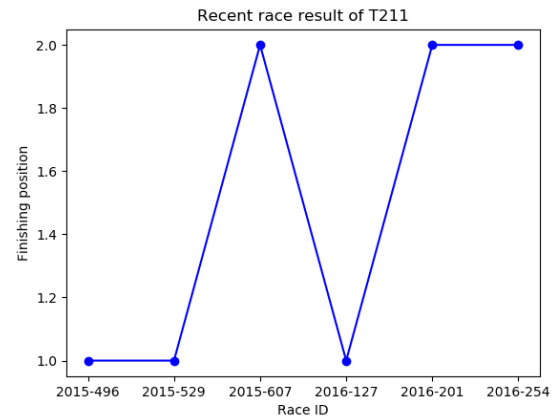
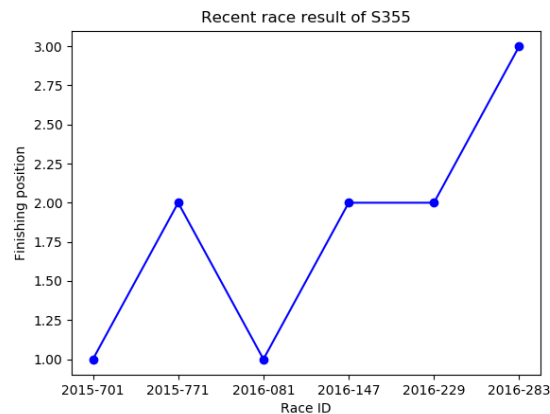
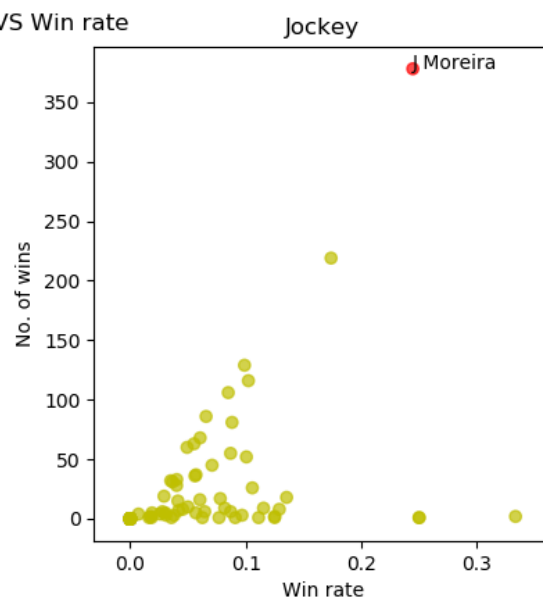
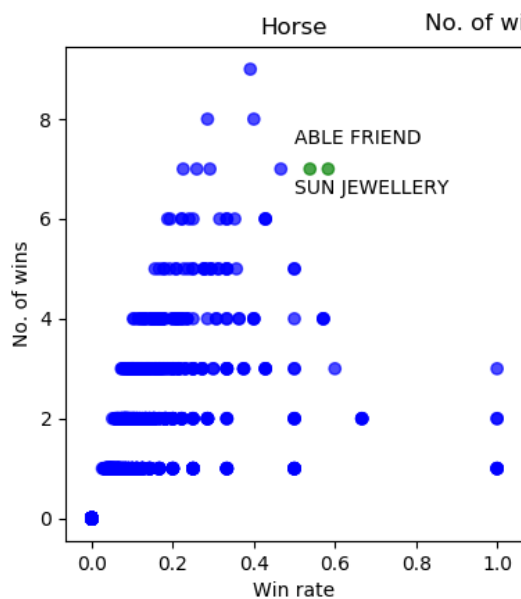


Line chart showing recent racing result of any horse (two examples are shown below)



These two horses (S355 and T211) are very competitive as they had leading positions (top 3) in their previous six runs.

Scatter Plot of Win Rate and Number of Wins (cover all horses and jockeys)

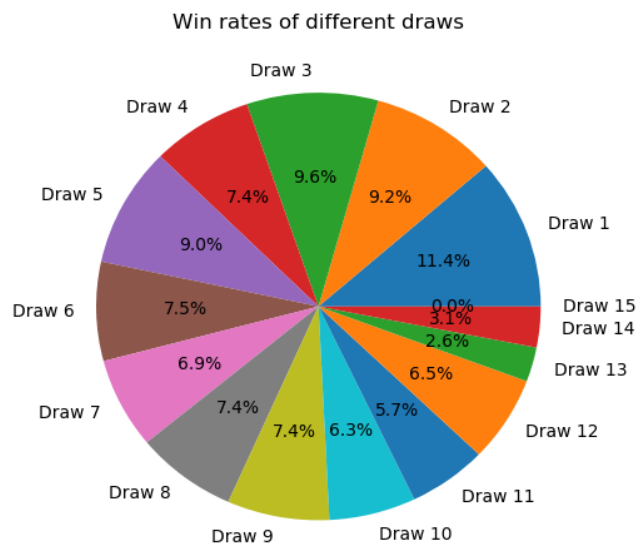


Win rate is defined as No. of wins/no. of races participated.

Able Friend and Sun Jewellery are the best horses as they have win rate higher than 0.5 and win more than six races.

J Moreira is the best jockey as he has won more than 250 races and has a win rate over 0.2.

Pie Chart of the Draw Bias Effect (to investigate whether horses starting in inner lanes has advantage)



I can observe that inner draws (horses on inner race lanes) have higher win rates and outer draws have lower win rates.

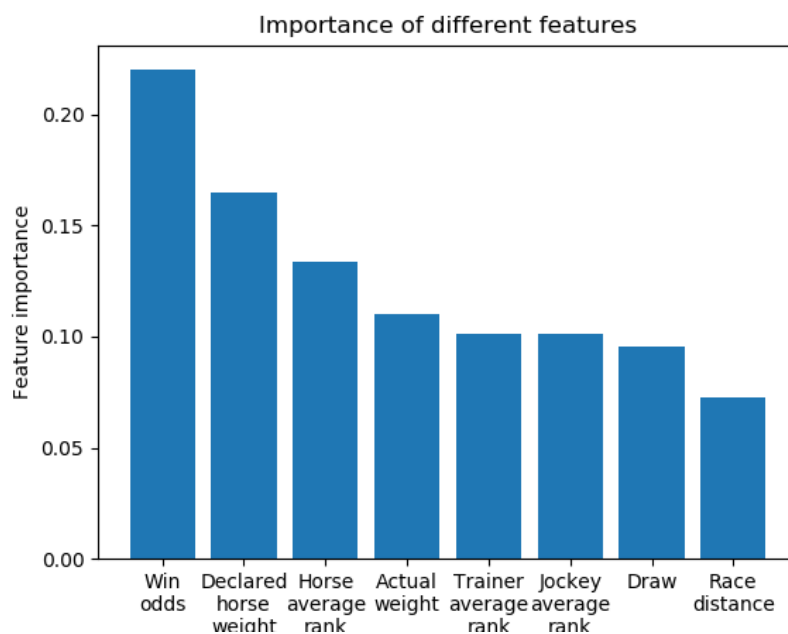
For draw number 1 to 5, except for number 4, the win rates are all equal to or above 9%.

For draw number 6 to 9, the win rates are about 7% to 7.5%.

For draw number 10 to 15, the win rates are equal to or below 6.5%.

It can be concluded that having inner draws (a horse on inner lane) indeed has an advantage.

Bar Chart of the Feature Importance

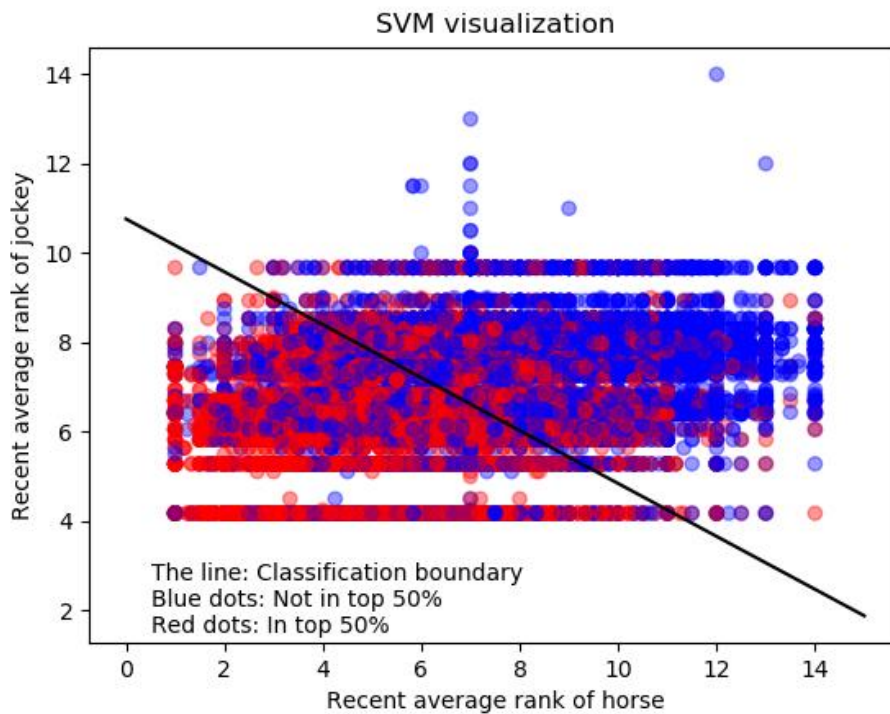


From the chart, we can know that win odds and declared horse weight give the most information on whether a horse can win the race.

The average ranks are the next important factors, with the horse's being most significant, then the trainer's and the jockey's.

Then it comes to draw number and race distance is the least important.

Visualize SVM



The red dots (in top 50%) concentrate in region where both the horse and jockey ranks are better.

The blue dots concentrate in region where both the horse and jockey ranks are worse.

This makes sense as horses and jockeys with better recent performance should have higher chance to get into top 50%.

The SVM classification boundary cut through the middle of the two groups.

Any new points above the boundary will be classified as 'not in top 50%' while those below will be classified as 'in top 50%'.