Evaluation:

This model provides an unsatisfactory accuracy of ~40%, I attempted to solve it using another model, a DecisionTreeRegressor from the same library as the DecisionTreeClassifier, with similar results (.py file titled DecisionTreeRegressor in the repository). Therefore, I can guess that in order to increase the accuracy of a model, more test data is necessary.

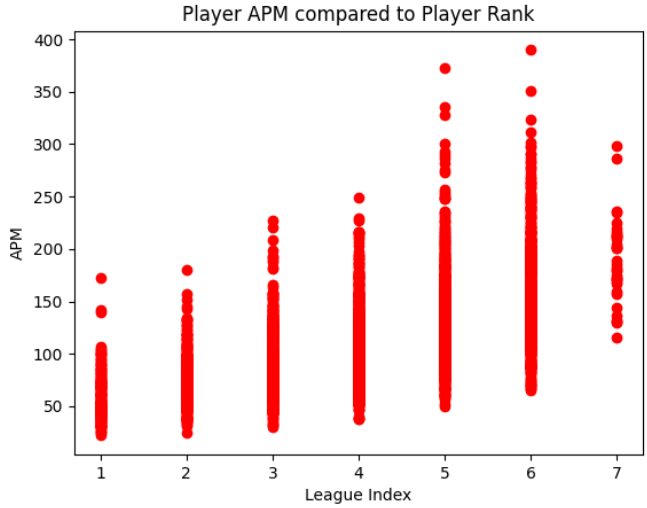
Findings:

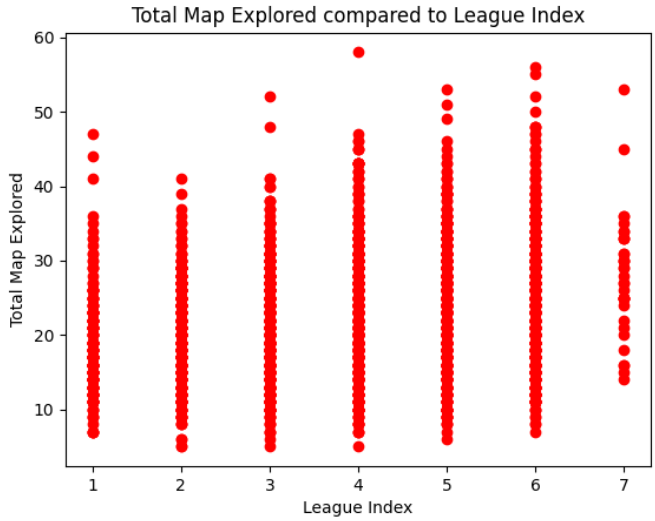
It appears that the players Age and how much time they spend in game don't play too much of a factor in their ranking, however their individual skill and understanding of the game, reflected by stats such as APM and Gap Between PACs, do show a correlation with where they place on the leaderboard.

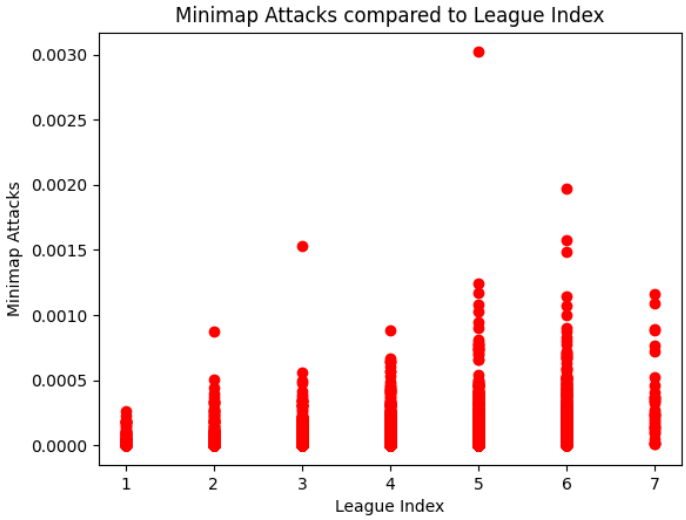
Hypothetical:

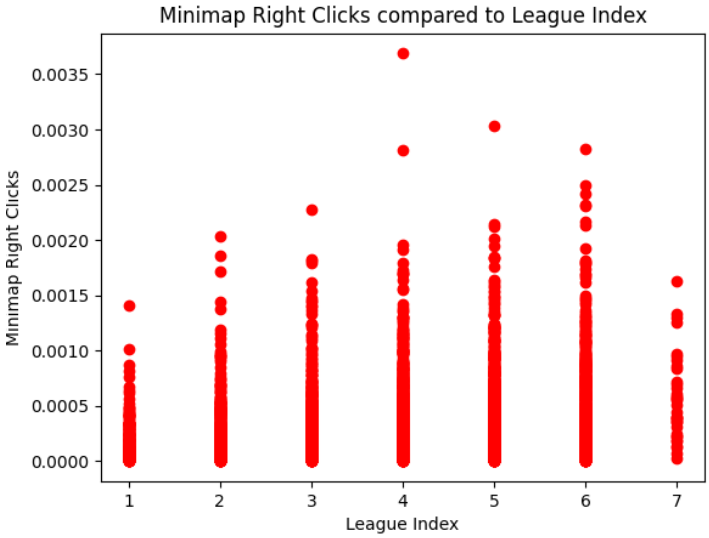
Based on my model results, I would greatly appreciate more data as that would help me increase the accuracy of my prediction model. Data on the fields APM, TotalMapExplored, MinimapAttacks, MinimapRightClicks, NumberOfPACs, GapBetweenPACs, ActionLatency, WorkersMade, ComplexUnitsMade, and ComplexAbilitiesUsed in particular would go a long way, as these fields seem to show the strongest relationship to a players rank.

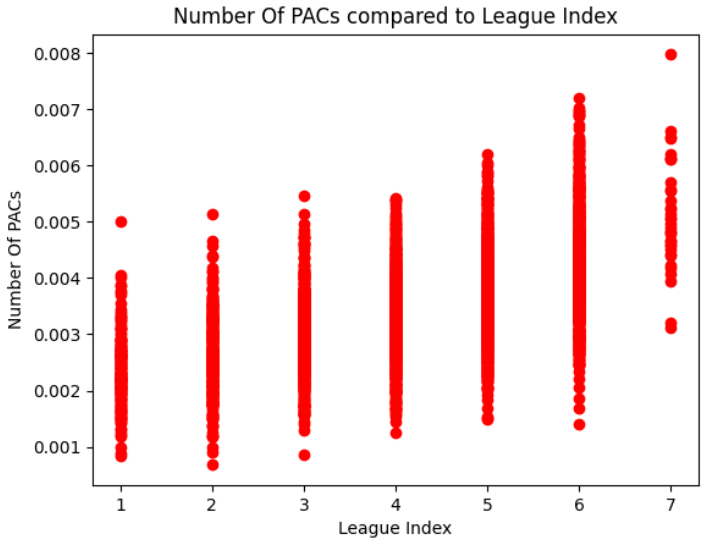
Meaningful Data:

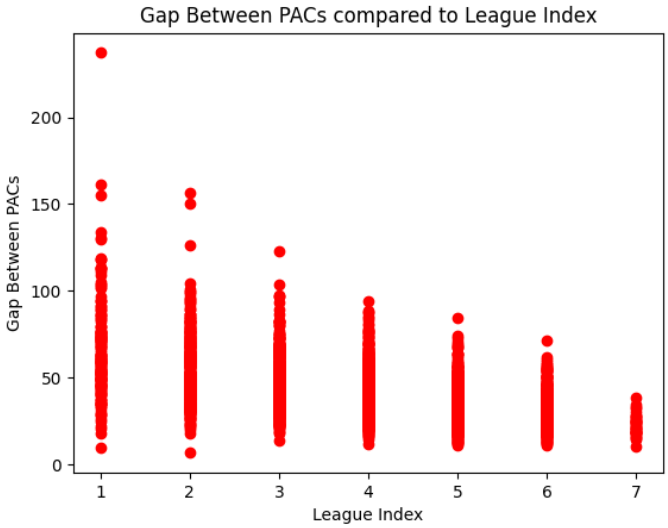


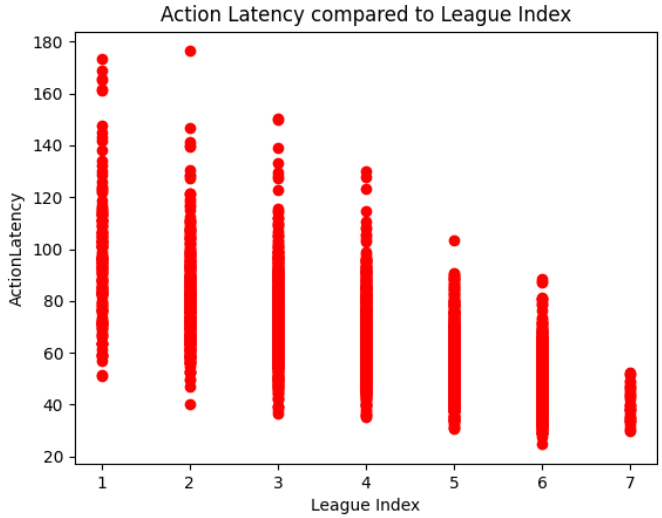


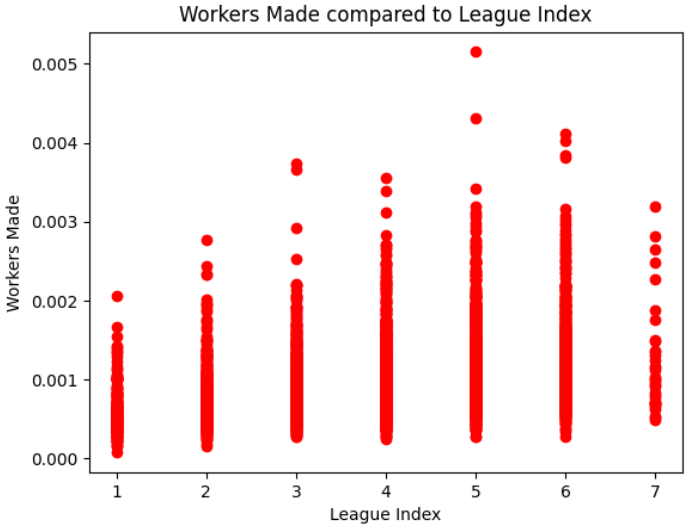


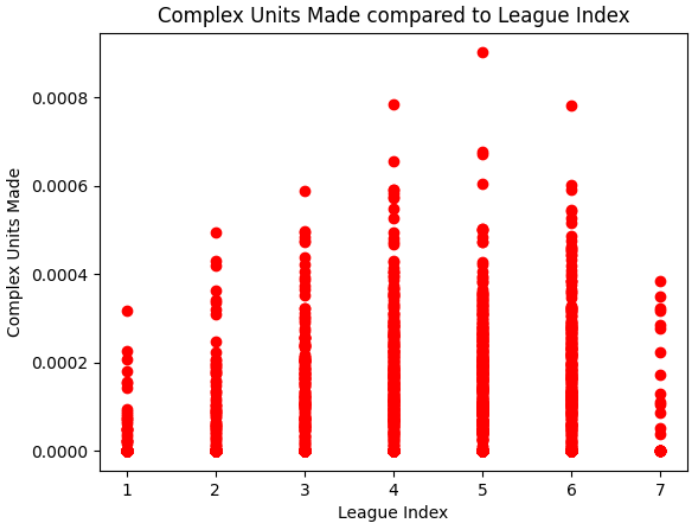

Minimap Right Clicks compared to League Index
Minimap Right Clicks
0.0035
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
1
2
3
4
5
6
7
League Index

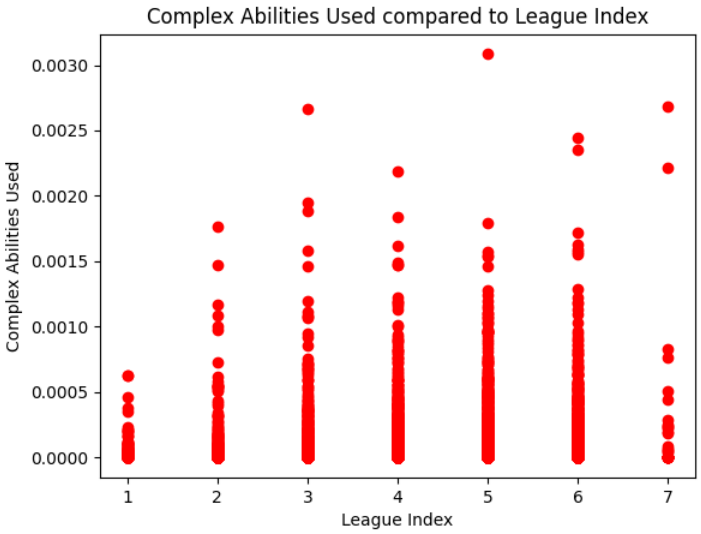

Number Of PACs compared to League Index
Number Of PACs
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
1
2
3
4
5
6
7
League Index

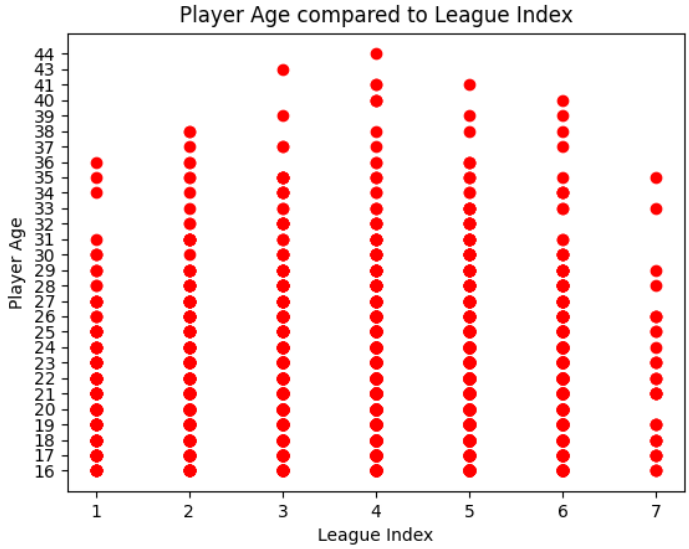

Gap Between PACs compared to League Index
Gap Between PACs
200
150
100
50
0
1
2
3
4
5
6
7
League Index


Action Latency compared to League Index
ActionLatency
League Index
180
160
140
120
100
80
60
40
20
1
2
3
4
5
6
7


Workers Made compared to League Index
Workers Made
League Index
0.005
0.004
0.003
0.002
0.001
0.000
1
2
3
4
5
6
7


Complex Units Made compared to League Index
Complex Units Made
League Index
0.0008
0.0006
0.0004
0.0002
0.0000
1
2
3
4
5
6
7


Complex Abilities Used compared to League Index
Complex Abilities Used
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
1
2
3
4
5
6
7
League Index


Player Age compared to League Index
Player Age
44
43
41
40
39
38
37
36
35
34
33
32
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
1
2
3
4
5
6
7
League Index