



PLAYERUNKNOWN'S BATTLEGROUNDS

BATTLE STATS

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Questions

- Does the amount of distance a player runs during the match affect their placement percentile?
- Does the more kills a player gets during a match increase their chance to win?

Data Preparation

- Data Integration: Creating new table data
- Data Cleaning:
 - Figuring out number of players on each team
 - Creating speed attribute
 - Getting rid of speed outliers and deleting teams with speed of 0
- Normalize: Fixing team kills

team_id	game_size	party_size	player_dist_ride	player_dist_walk	player_survive_time	player_kills	team_placement	speed
1	28	4	1353.6627474999998	2694.0872725	1535.9265	1	8	1.7540470019235943
2	28	4	2347.8656625	1823.527877	1295.1605	4	6	1.4079551352901822
4	28	4	0.0	390.90932549999997	389.73925	7	16	1.003002200830427
5	28	3	1688.596923333333	1965.0436900000007	936.159	7	12	2.0990490824742385
6	28	3	8418.201226666666	2309.0201833333333	1827.412	8	1	1.2635465802639652

Tools Used

- Python
 - Numpy
 - matPlotLib
 - Pandas
- Excel

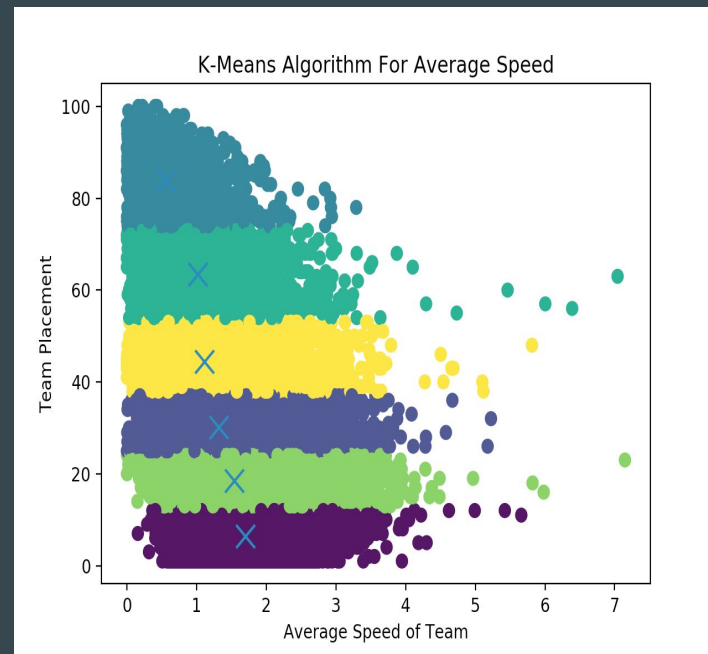
matplotlib



Excel

Clustering

- K Means Algorithm for Average speed of team
- Speed of 1.8 gives best placement



Association

- Conditional Probability

Average Placement for less than 1 kill: 36.67432441322

Average Placement for 1 or more kills and less than 3: 24.806010829791635

Average Placement for 3 or more kills: 12.791688527496298

Percentage for first place finish with less than 1 kill: 0.08%

Percentage for first place finish with 1 or more kills and less than 3: 2.09%

Percentage for first place finish with more than or equal to 3 kills: 17.39%

Knowledge Gained

- Aggressive (high average velocity and large number of kills) play styles tend to have higher placement
- Average speed should be between 1.75-1.85 m/s (constant movement with little to no stoppage)
- Average team kills should be 3 or more kills per player

Knowledge Applied

- Play the game and test results
- See if 3 or more kills per player results in higher winning percentage
- See if constant movement affects final placement