

Vote forNBA Most Valuable Player.

NBA MVP Selection

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Introduction

Every NBA season, there will be a selection of the Most Valuable Player (MVP) award. It is one of the most prestigious accolades that an NBA player can receive in his career. The selection is conducted by independent media members who are not affiliated with teams nor players. Each member selects players in a weighted voting system. From 2010, public can also participate in voting the MVP. However, there are so many irrational factors such as public image and scandals that can affect the selection of a player. In my project, I will only focus on the performance of playing basketball, using 4 visualization, based on the data NBA_Players_Boxscore, to choose my MVP.

Data preparation

There are over 300 players in the league, while most of them are not eligible for being MVP, so I will filter the data first. The eligible players should be:

- starters for every game played
- average playing time per game more than 25 minutes
- scores over 23 points per game

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## [1] 19
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After filtering by basic requirements, there are 19 players left for later discussion.

Now on to the graphs!

Visualization

Viz1: Wildcard (huxtable)

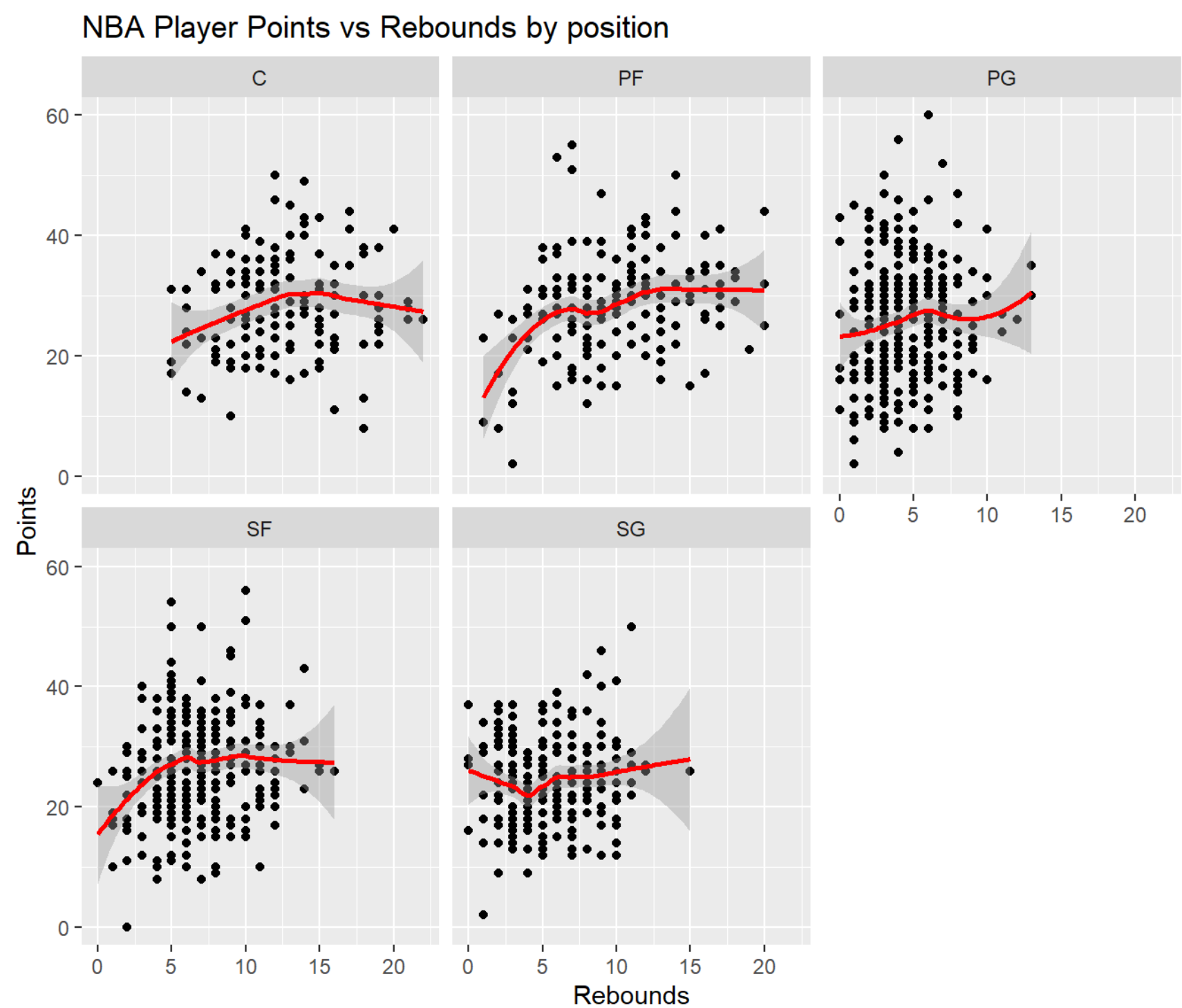
PPG: points per game
RPG: rebounds per game
APG: assists per game

player name	position	PPG	RPG	APG
L. James	Small Forward	30.2	8.18	6.26
G. Antetokounmpo	Power Forward	30.1	12	5.94
J. Embiid	Center	29.8	11.6	3.92
K. Durant	Power Forward	29.6	7.29	6.37
T. Young	Point Guard	27.4	3.79	9.49
D. DeRozan	Small Forward	27.2	5.15	4.91
N. Jokic	Center	27.1	13.6	7.76

J. Morant	Point Guard	27.1	5.94	7.09
J. Tatum	Small Forward	26.7	7.72	4.68
K. Irving	Point Guard	26.7	4.45	5.7
D. Mitchell	Shooting Guard	25.8	4.22	5.37
S. Gilgeous-Alexander	Shooting Guard	24.5	4.96	5.91
P. George	Shooting Guard	24.4	6.87	5.68
D. Lillard	Point Guard	24	4.14	7.31
J. Brown	Shooting Guard	23.5	6.25	3.5
B. Beal	Shooting Guard	23.2	4.72	6.62
A. Davis	Power Forward	23.2	9.85	3.05
D. Fox	Point Guard	23.2	3.92	5.58
B. Ingram	Small Forward	23.1	5.85	5.62

Players such as Giannis, LeBron, and Jokic have not only scored many points, their rebounds and assists are also better than most of others. Because of the basketball rules, players on different positions have different data structure. Generally, centers are responsible for getting rebounds, guards have more assists and forwards are more comprehensive. Therefore, we need to facet the players by their position.

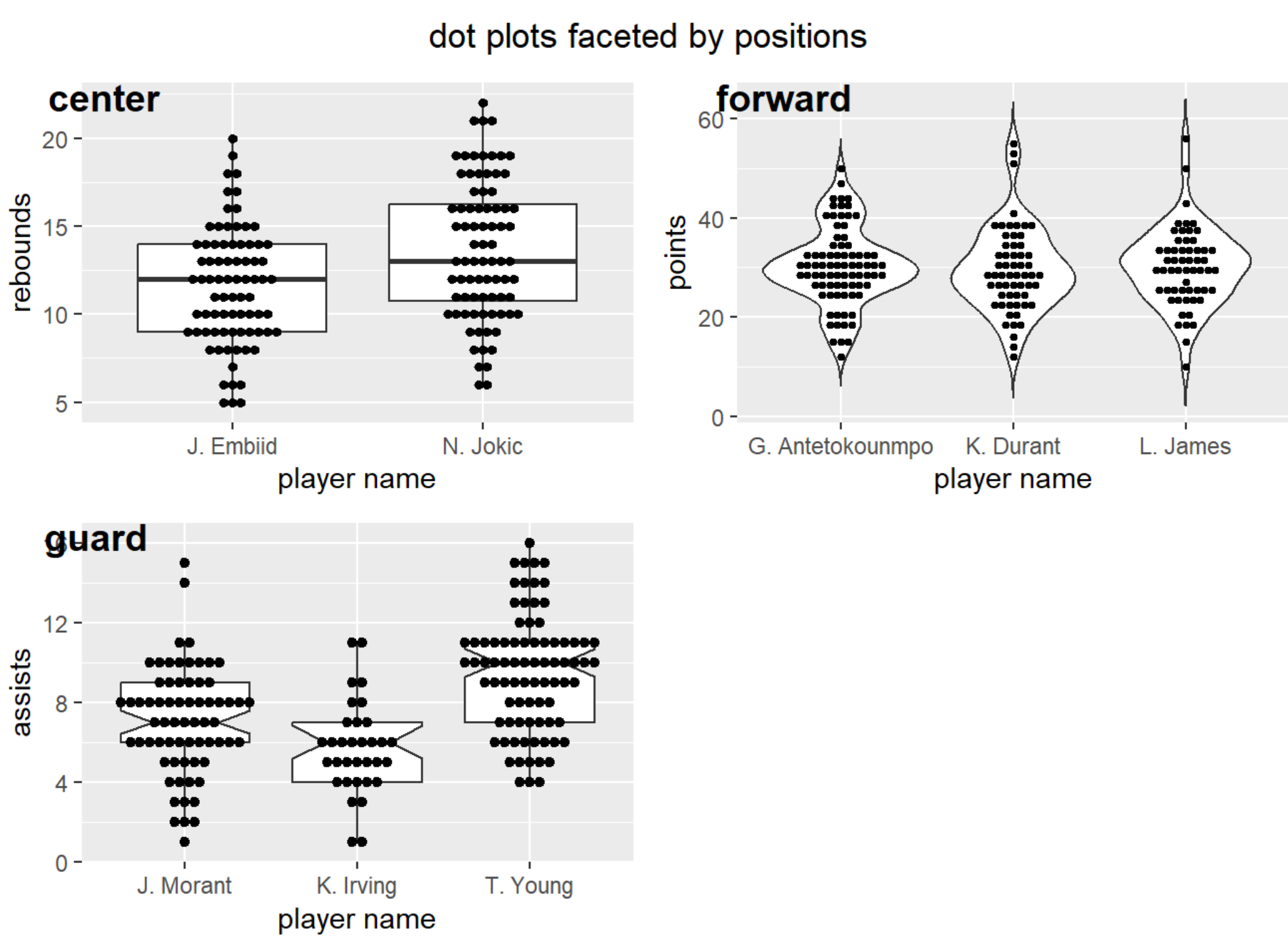
Viz2 categorical(facet by positions)



Because of the basketball rules, players on different positions have different data structure. Generally, centers are responsible for getting rebounds, guards have more assists and scores, forwards are more comprehensive. Therefore, it is not wise to compare players' stats directly.

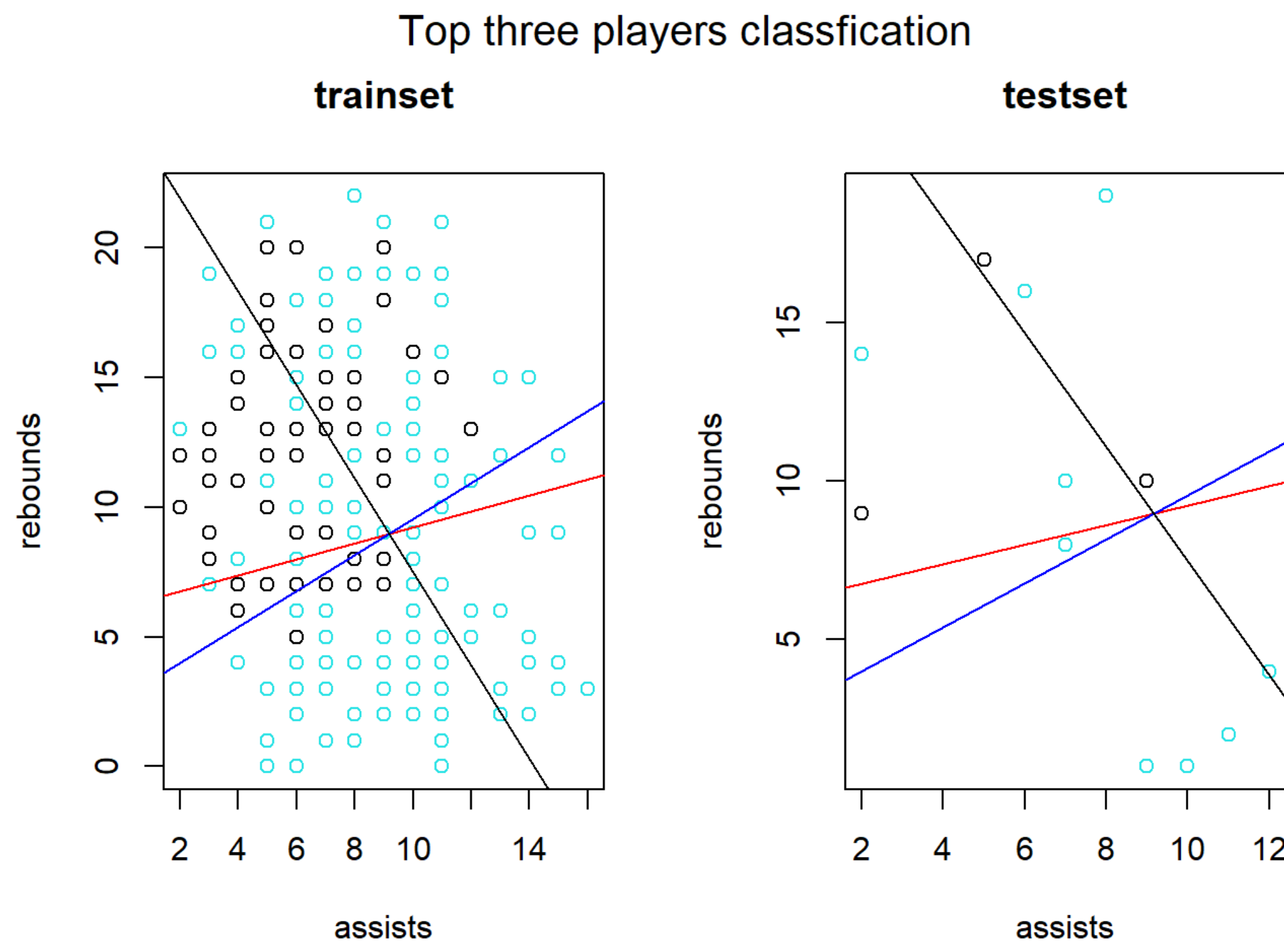
Viz3 2D (dot plots for different positions)

Let's plot three dot plots, one for centers, one for forwards, one for guards, and find the best player in each position. Let's use the first 2 or 3 players with highest PPG in each position, based on the huxtable from Viz1.



We choose the best player in each position, which are Nikola Jokic, Giannis Antetokounmpo and Trae Young and compare their performance by classification.

Viz4 homebrew



The black line representing Giannis, which has a negative relationship between rebounds and assists, while the blue line representing Jokic, is better than the red line representing Trae Young, related to assists and rebounds, so Nikola Jokic has the best performance.

Conclusion

I used four visualizations to analyze the selection of MVP. Based on my results, the 2021 NBA MVP should go to Nikola Jokic.