NBA Players - Croatia First

The analysis was made with the aim of exploring NBA Players (1996-22) database and finding the best Croatian players in selected time period!

Source: www.kaggle.com

Database and the very first challenge!

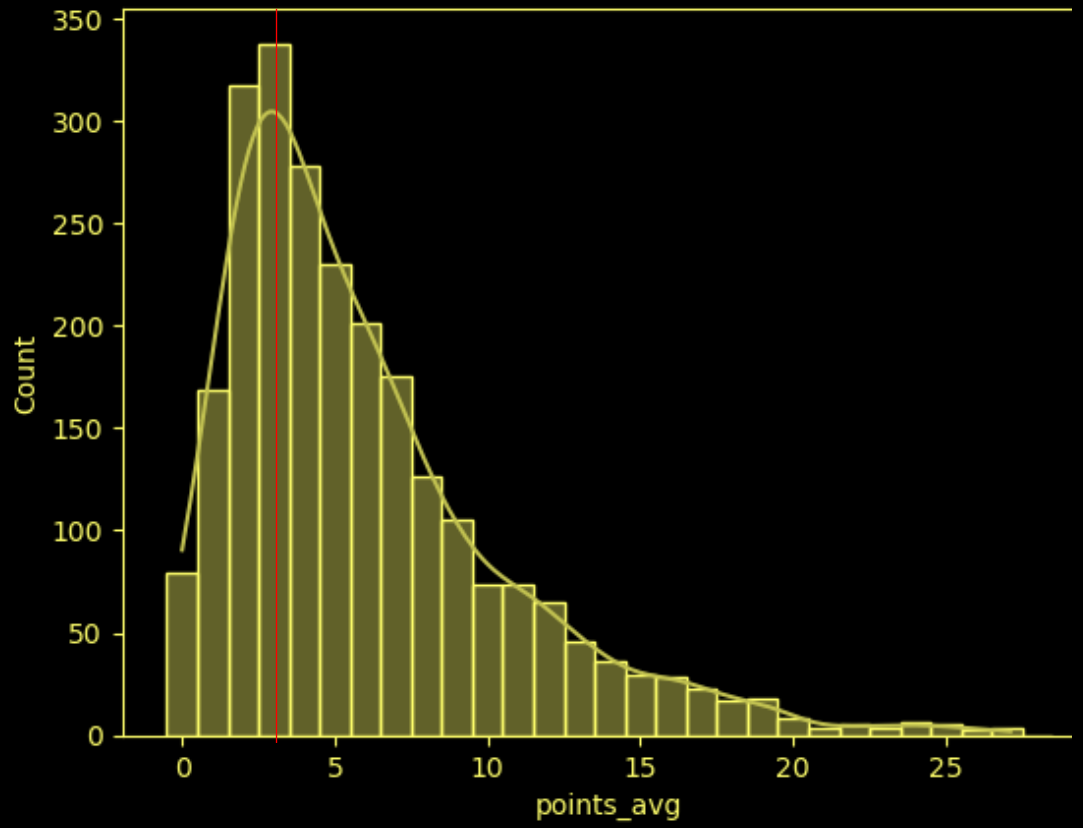
```
df.info()
```

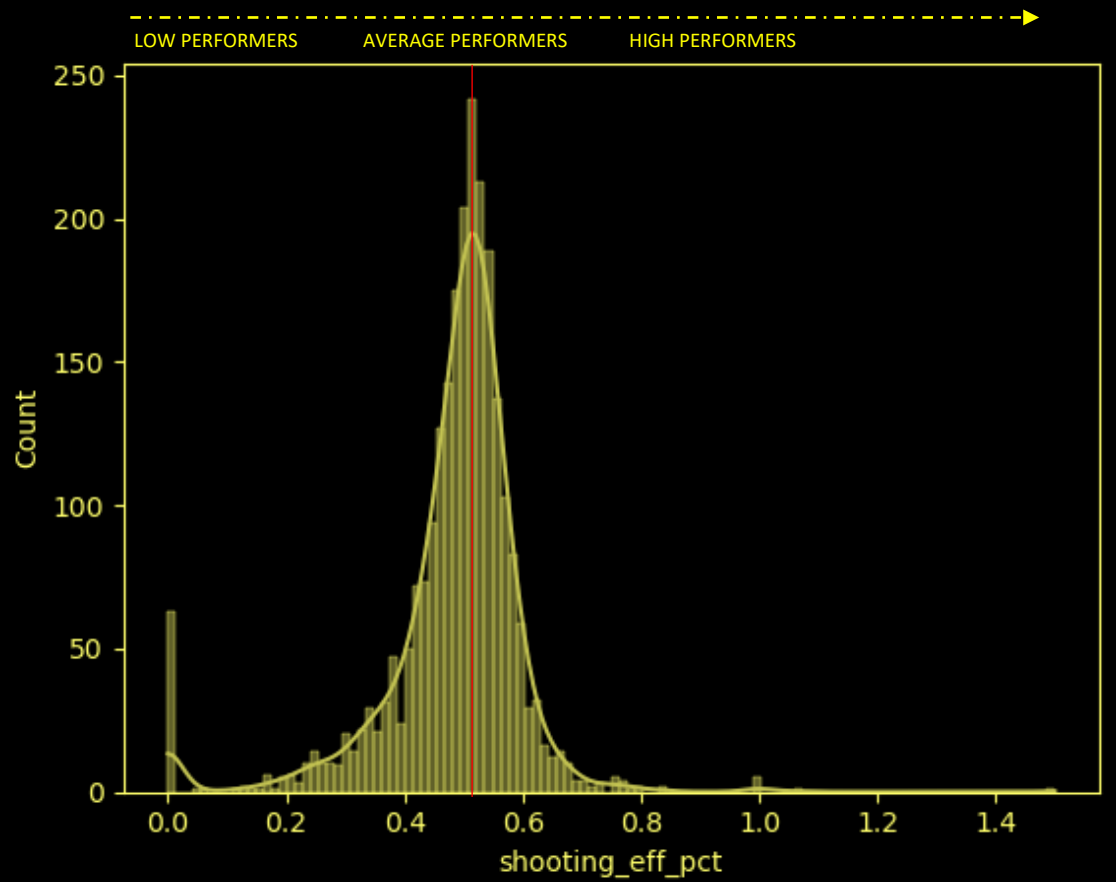
```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 12305 entries, 0 to 12304
Data columns (total 22 columns):
 #   Column             Non-Null Count  Dtype
---  ------             --------------  -----
 0   Unnamed: 0         12305 non-null  int64
 1   player_name        12305 non-null  object
 2   team_abbreviation  12305 non-null  object
 3   age                12305 non-null  float64
 4   player_height      12305 non-null  float64
 5   player_weight      12305 non-null  float64
 6   college            12305 non-null  object
 7   country            12305 non-null  object
 8   draft_year         12305 non-null  object
 9   draft_round        12305 non-null  object
 10  draft_number       12305 non-null  object
 11  gp                 12305 non-null  int64
 12  pts                12305 non-null  float64
 13  reb                12305 non-null  float64
 14  ast                12305 non-null  float64
 15  net_rating         12305 non-null  float64
 16  oreb_pct           12305 non-null  float64
 17  dreb_pct           12305 non-null  float64
 18  usg_pct            12305 non-null  float64
 19  ts_pct             12305 non-null  float64
 20  ast_pct            12305 non-null  float64
 21  season             12305 non-null  object
dtypes: float64(12), int64(2), object(8)
memory usage: 2.1+ MB
```

- Club names throughout history (NBA has 30 clubs, while the database has more)

Meet the Metrics!

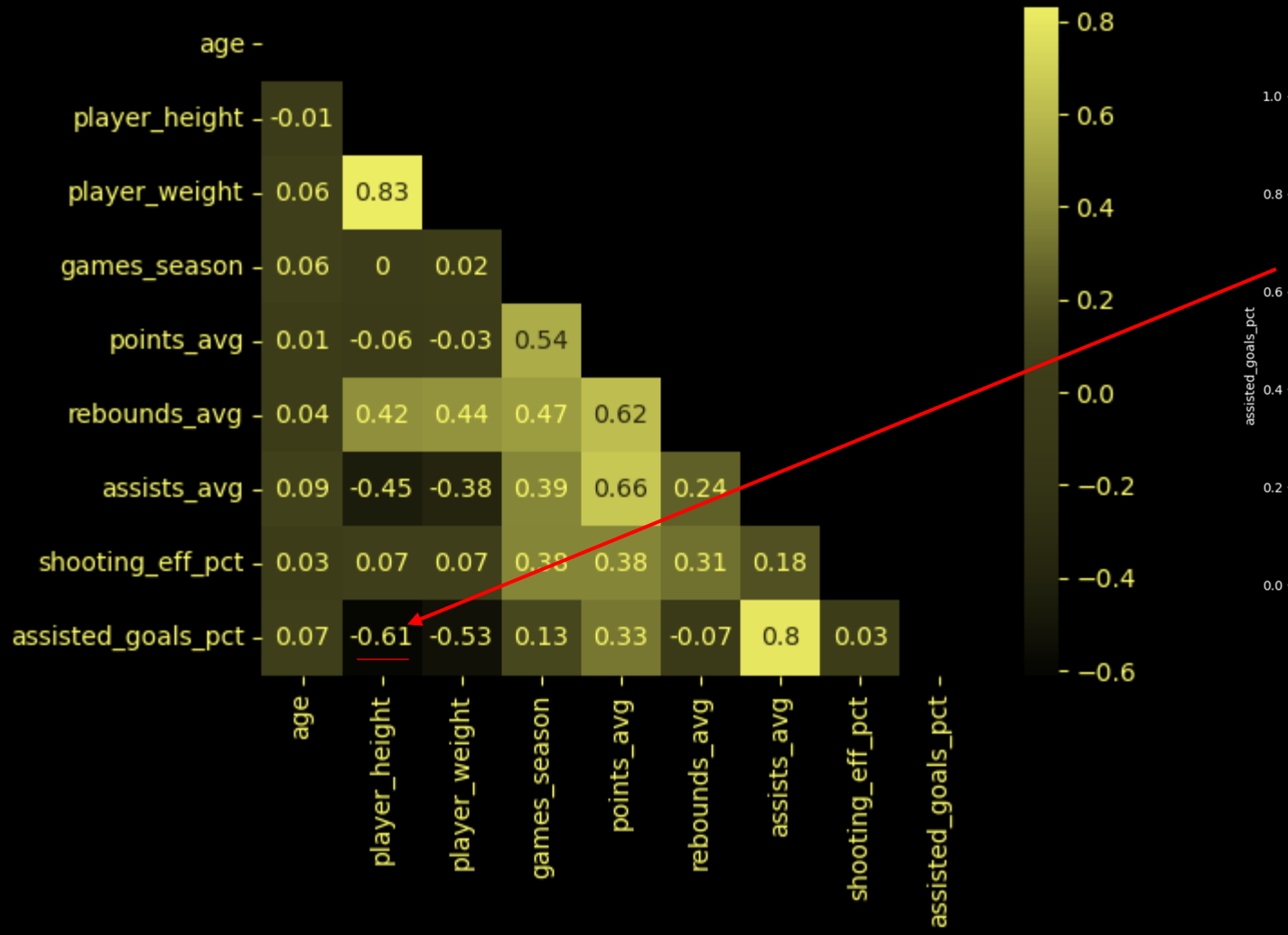
- ‘points_avg’: Avg number of points scored
- ‘rebounds_avg‘: Avg number of rebounds (when a player gains possession of the ball after any missed shot) grabbed
- ‘assists_avg’: Avg number of assists distributed
- ‘shooting_eff_pct‘:Measure of the player's shooting efficiency that takes into account free throws, 2 and 3 point shots
- ‘assisted_goals_pct‘: Pct of teammate field goals the player assisted while he was on the floor

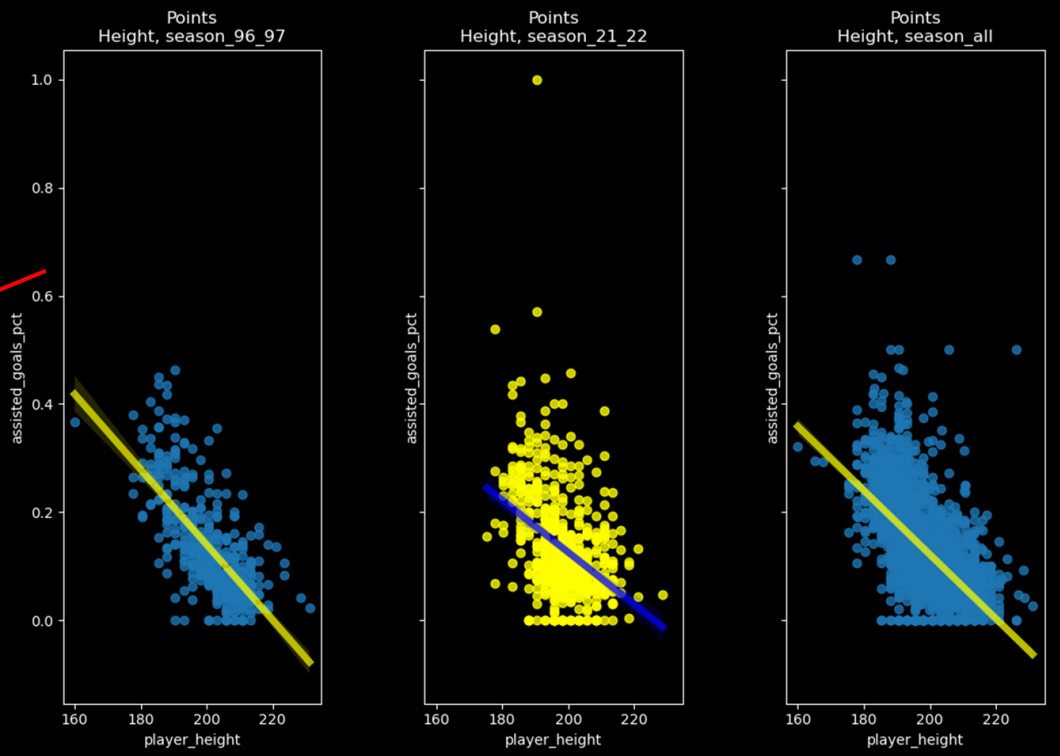




We can see that the data used in ratings is normally distributed!

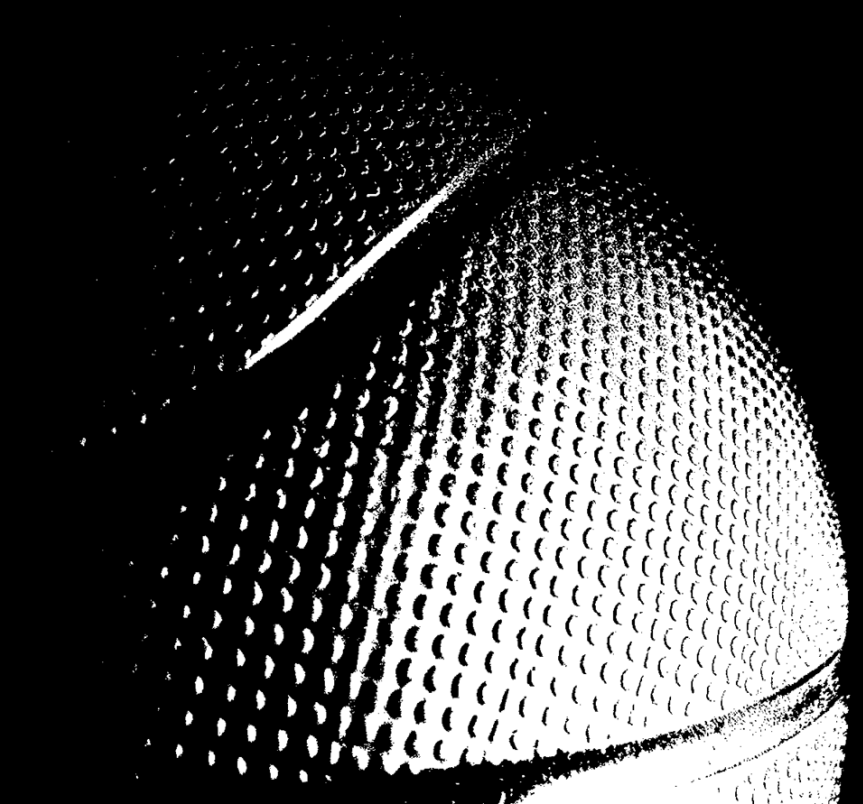
Correlation



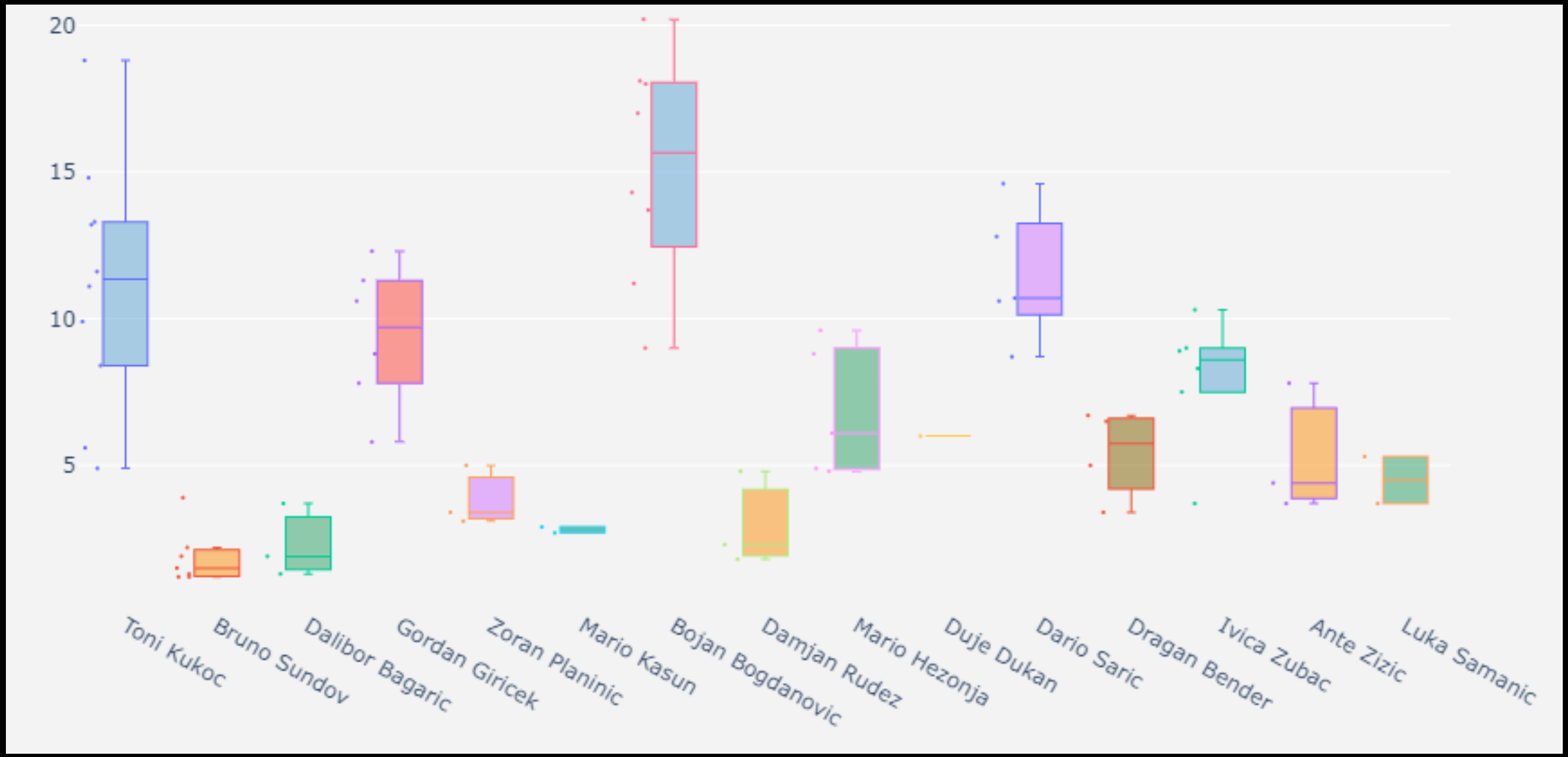


An example of the relationship between these two variables - regplot

Check out all the Croatian players with Box plots!

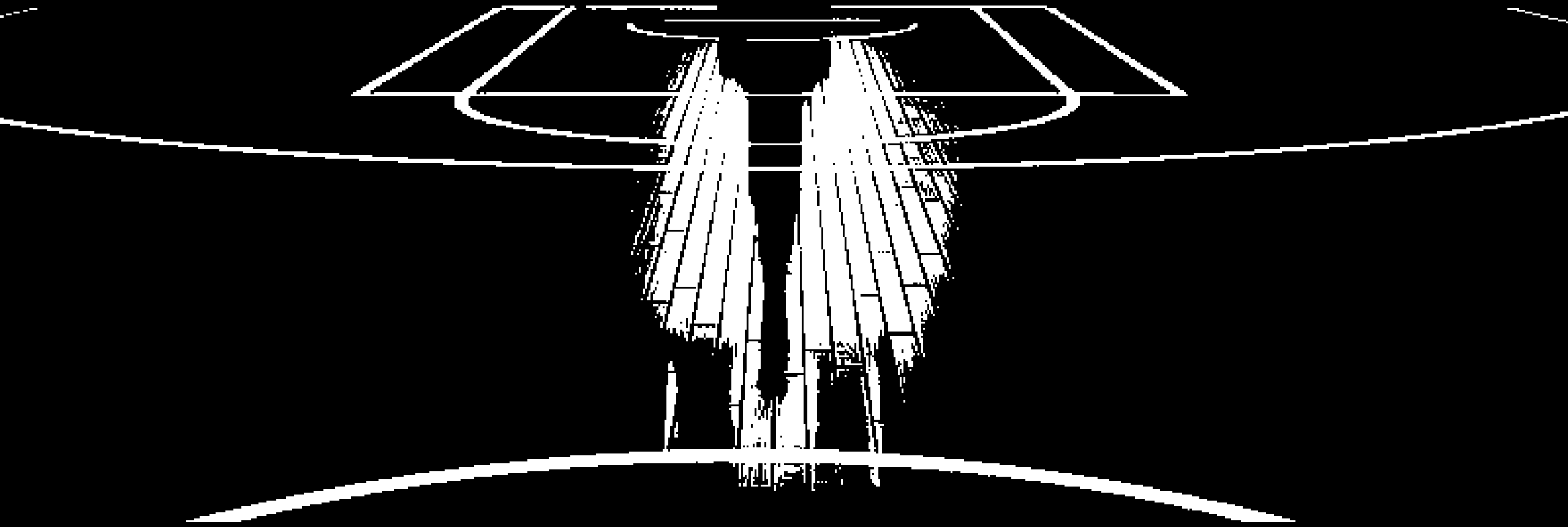


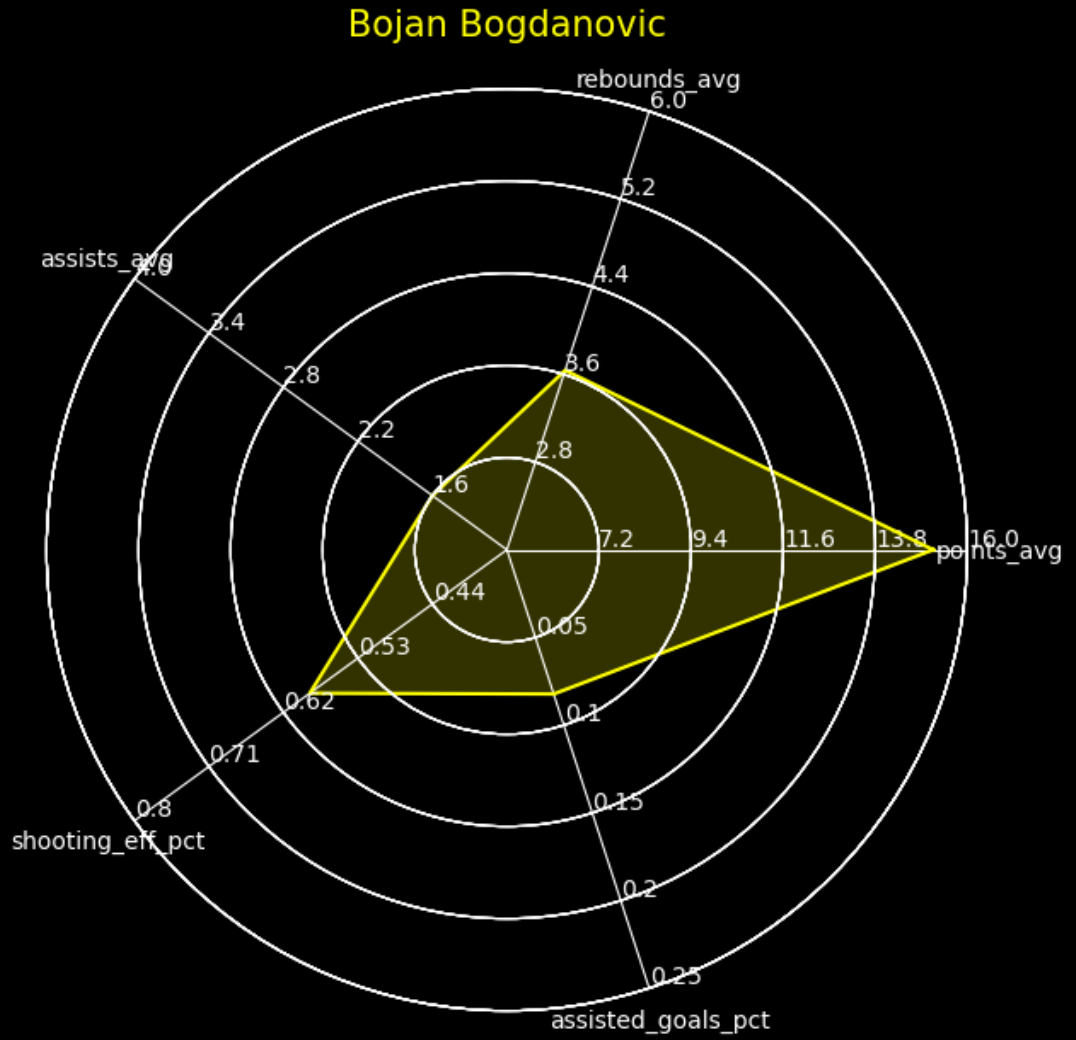
Average Points Scored by Croatian NBA Players

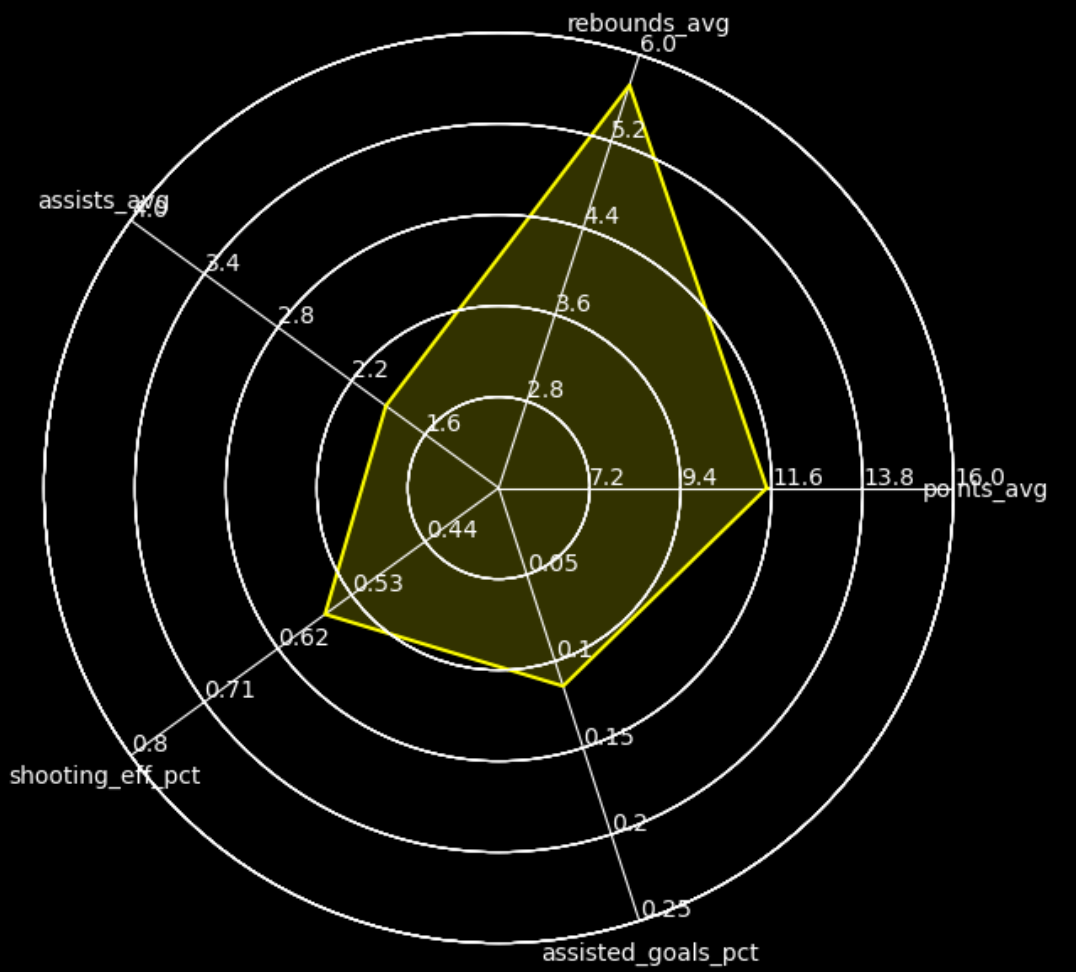


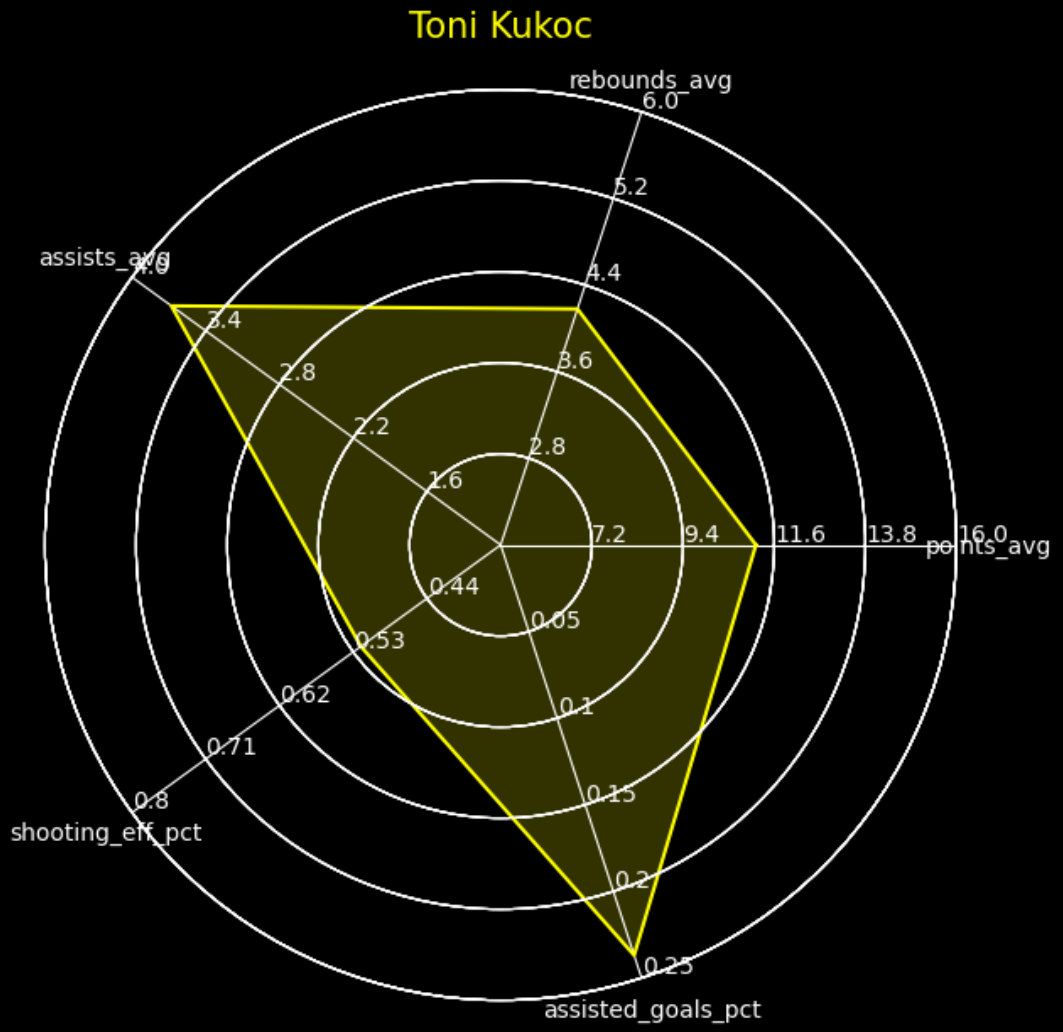
Complex Spider/Radar plots!

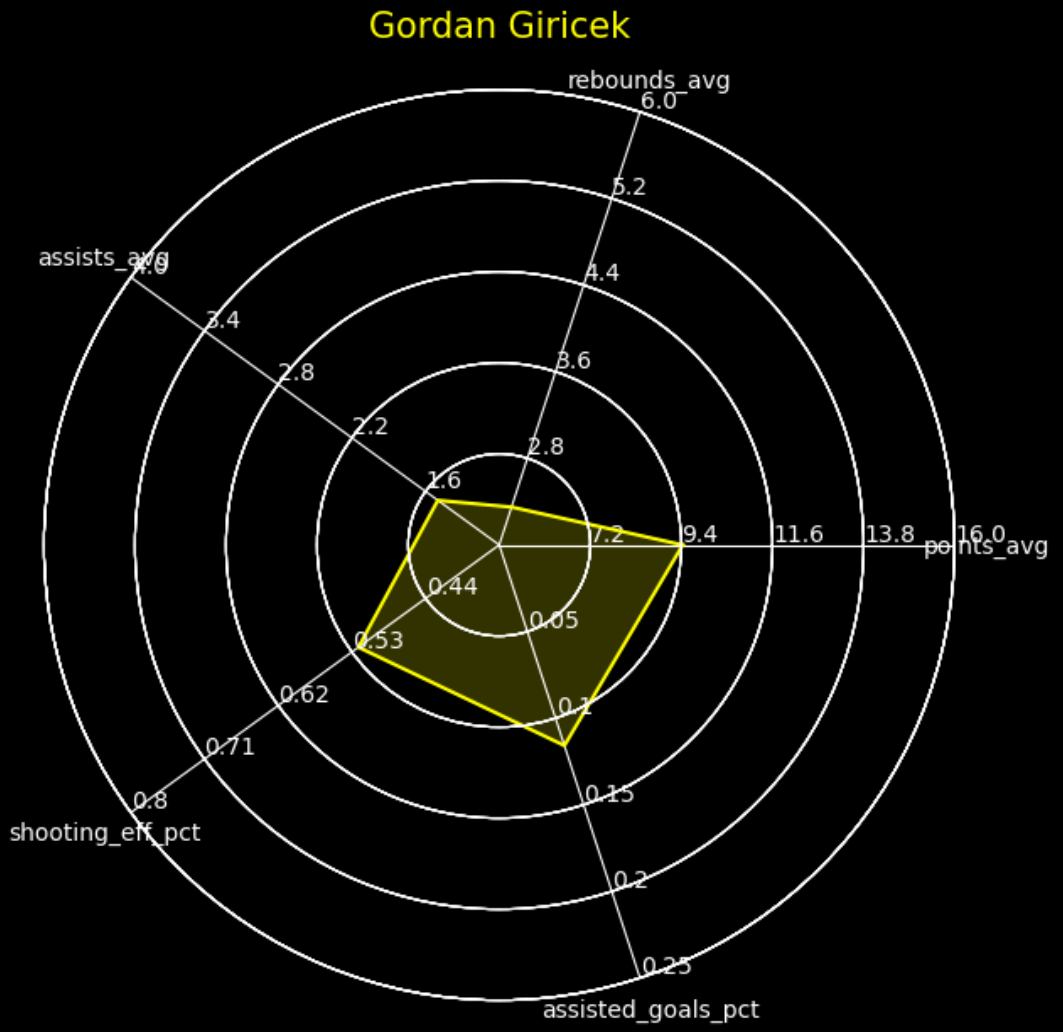
(with different scales for each variable)

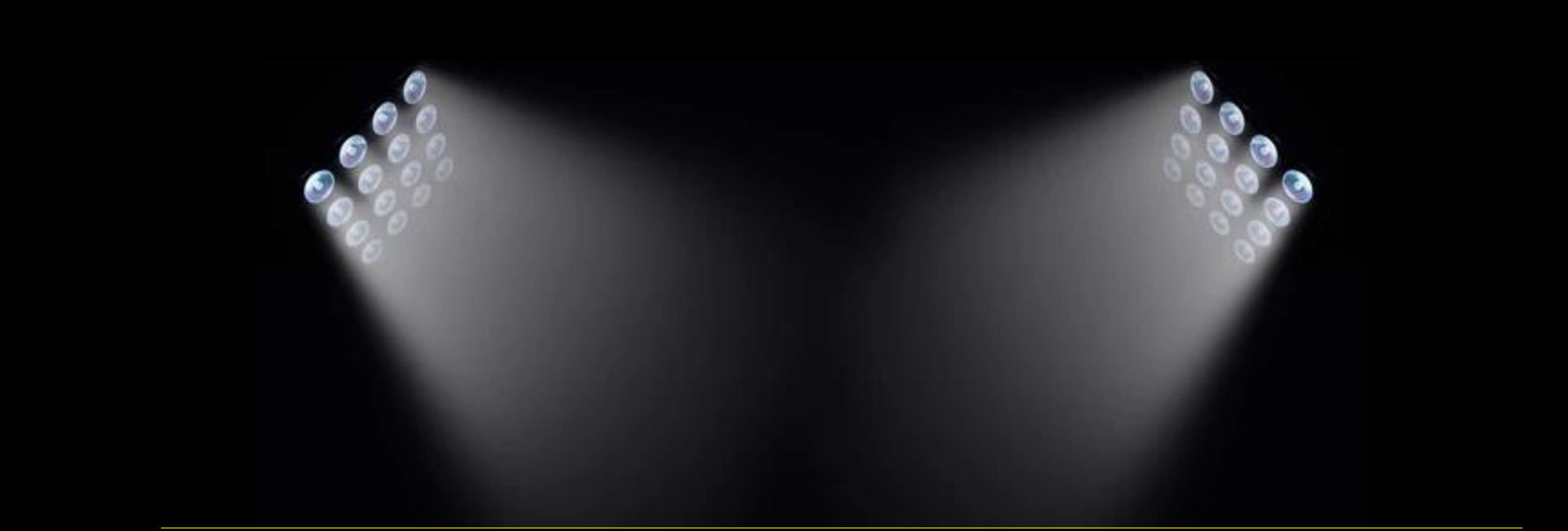



Bojan Bogdanovic
rebounds_avg
6.0
5.2
4.4
3.6
2.8
2.2
1.6
assists_avg
4.0
3.4
2.8
2.2
1.6
7.2
9.4
11.6
13.8
16.0
points_avg
0.44
0.53
0.62
0.71
0.8
shooting_eff_pct
0.05
0.1
0.15
0.2
0.25
assisted_goals_pct

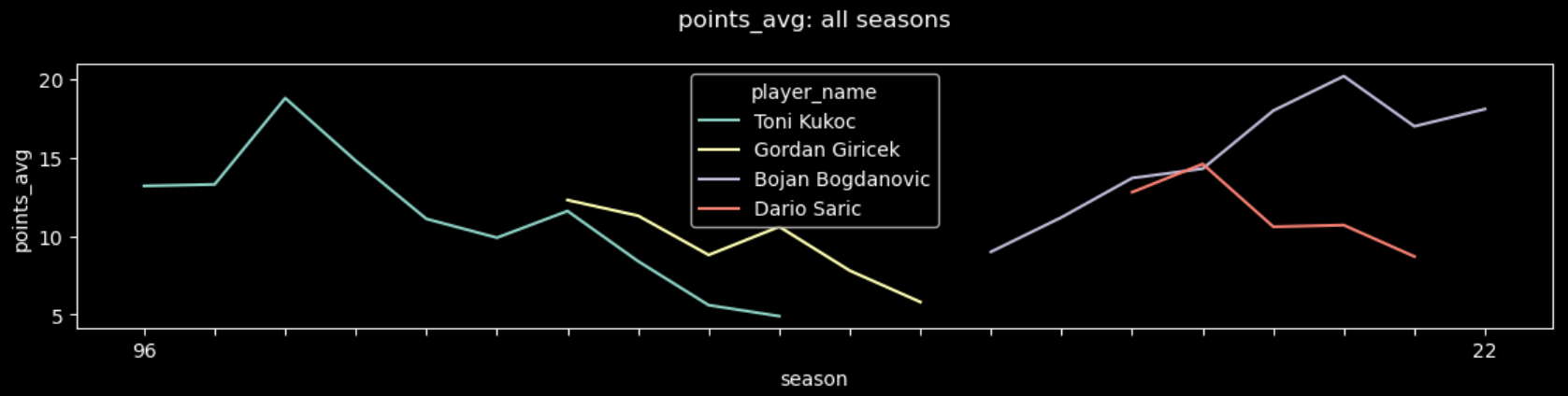

Dario Saric
rebounds_avg
6.0
5.2
4.4
3.6
2.8
2.2
1.6
assists_avg
4.0
3.4
2.8
2.2
1.6
7.2
9.4
11.6
13.8
16.0
points_avg
0.44
0.53
0.62
0.71
0.8
shooting_eff_pct
0.05
0.1
0.15
0.2
0.25
assisted_goals_pct

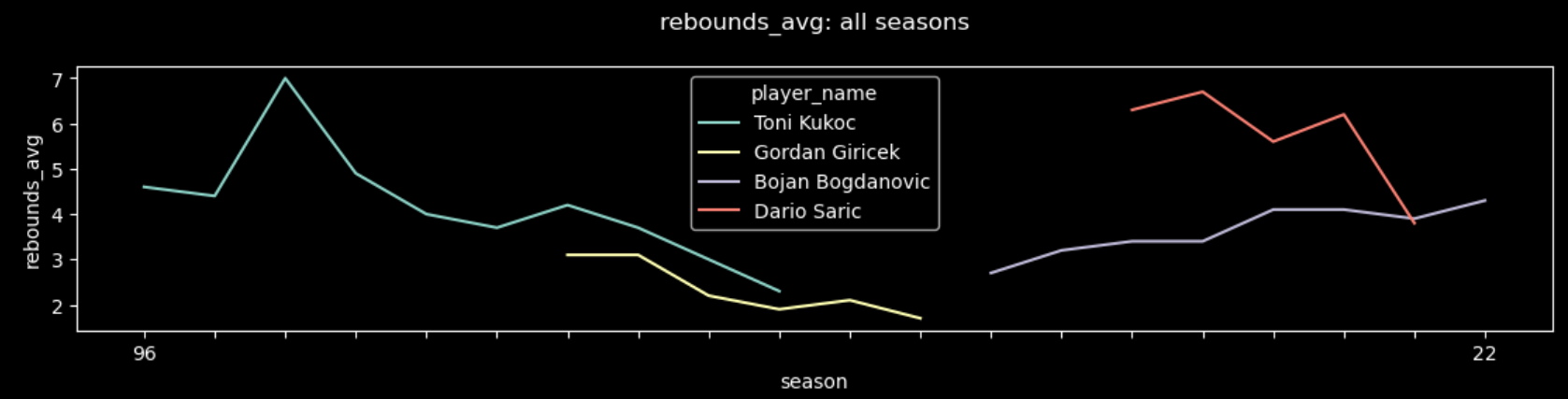

Toni Kukoc
rebounds_avg
6.0
5.2
4.4
3.6
2.8
2.2
1.6
assists_avg
3.4
2.8
points_avg
7.2
9.4
11.6
13.8
16.0
0.44
0.53
0.62
0.71
0.8
shooting_eff_pct
0.05
0.1
0.15
0.2
0.25
assisted_goals_pct

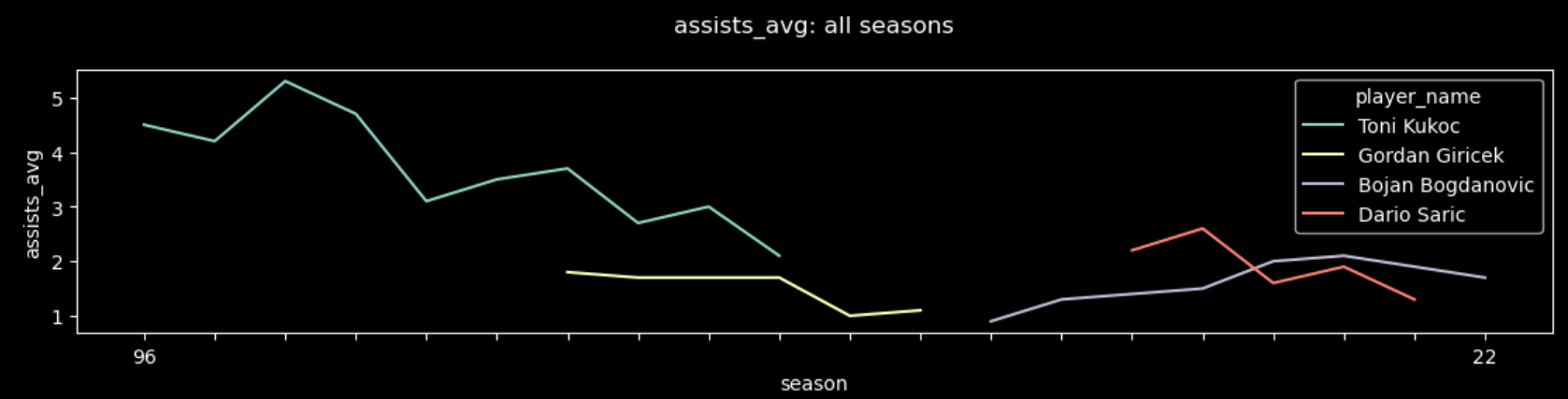

Gordan Giricek
rebounds_avg
6.0
5.2
4.4
3.6
2.8
2.2
1.6
assists_avg
3.4
2.8
points_avg
7.2
9.4
11.6
13.8
16.0
0.44
0.53
0.62
0.71
0.8
shooting_eff_pct
0.05
0.1
0.15
0.2
0.25
assisted_goals_pct

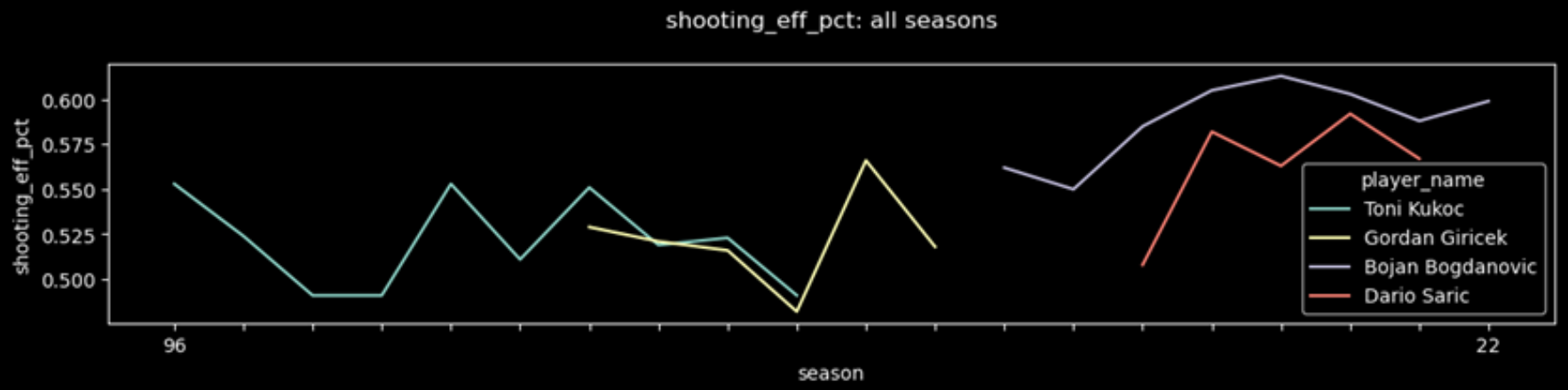


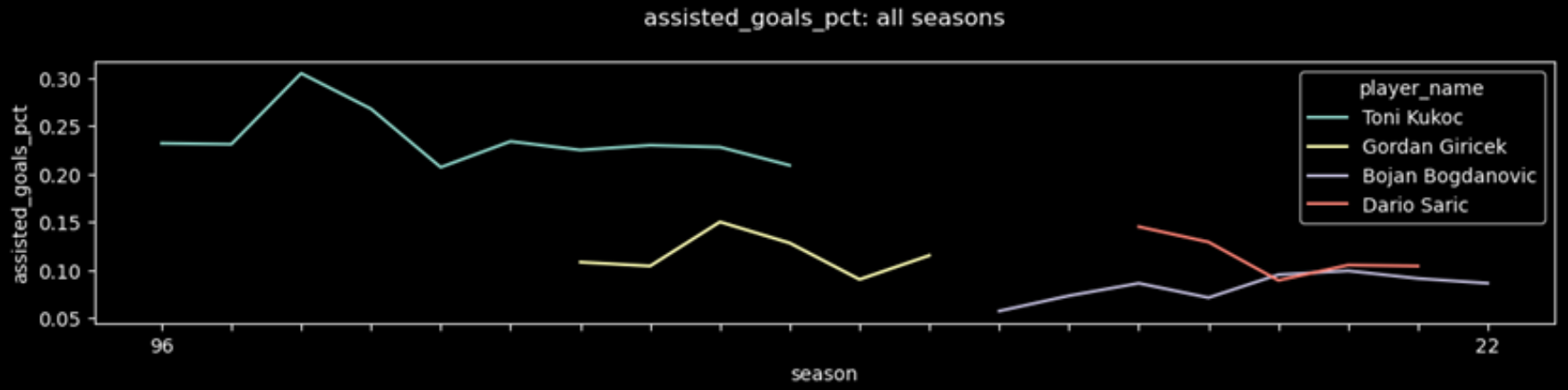
Visualization of individual performances through out a career in the NBA


points_avg: all seasons
player_name
Toni Kukoc
Gordan Giricek
Bojan Bogdanovic
Dario Saric
points_avg
20
15
10
5
96
22
season


rebounds_avg: all seasons
player_name
Toni Kukoc
Gordan Giricek
Bojan Bogdanovic
Dario Saric
rebounds_avg
7
6
5
4
3
2
96
22
season


assists_avg: all seasons
player_name
Toni Kukoc
Gordan Giricek
Bojan Bogdanovic
Dario Saric
assists_avg
5
4
3
2
1
96
22
season


shooting_eff_pct: all seasons
shooting_eff_pct
0.600
0.575
0.550
0.525
0.500
96
22
season
player_name
Toni Kukoc
Gordan Giricek
Bojan Bogdanovic
Dario Saric


assisted_goals_pct: all seasons
assisted_goals_pct
0.30
0.25
0.20
0.15
0.10
0.05
96
22
season
player_name
Toni Kukoc
Gordan Giricek
Bojan Bogdanovic
Dario Saric

Thanks for your attention!