

Predictive Modeling on 2017 NBA Playoffs

Qingyuan, Zhang

Jihan, Wei

Ruxue, Peng

Zixuan, Guan

Yue, Jin

April 26, 2017

1 Introduction



The Playoffs champion goes to...

2 Data

The data used for this project is mainly scrapped from basketball-reference.com and stats.nba.com. Among all kinds of measurement for a player, for a game, or for a season, we chose to use these key features as measurement for the performance of a team during one game played.

EFF Feature

The NBA publishes online all the basic statistics recorded officially by the league. Individual player efficiency is expressed there by a stat referred to as 'efficiency' and abbreviated EFF. It is derived by a simple formula below:
$$\text{NBA Efficiency} = ((\text{Points} + \text{Rebounds} + \text{Assists} + \text{Steals} + \text{Blocks}) - ((\text{Field goals attempts} - \text{Field goals made}) + (\text{Free throws attempts} - \text{Free throws made}) + \text{Turnovers}))$$
 To construct the feature, we found out for each game, the player lineup of the two teams and their minutes played in that game, then query their efficiency score of the corresponding game season, at last we average over players' EFF score for the two team.