STAT 503 Assignment 1: Basketball - Skills and Salary
Due: Sketch of report, with analysis plan and summary statistics in class
Jan 21. Full report due Jan 28, by class time. Hand in one per working group.

The data set contains player statistics for the 2008-2009 season, and salaries for the 2009-2010 season. Statistics come from the web page

http://www.databasebasketball.com/stats_download.htm

and salaries from

http://content.usatoday.com/sportsdata/basketball/nba/salaries/team.

The variables recorded are:

lastname	
firstname	
salary	
position	
ilkid	an id
year	all are 2009
team	
leag	
gp	games played
minutes	minutes played
oreb	offensive rebounds
dreb	defensive rebounds
reb	rebounds
asts	assists
stl	steals
blk	blocks
turnover	turnovers
pf	personal fouls
fga	field goals attempted
fgm	field goals made
fta	free throws attempted
ftm	free throws made
tpa	three pointers attempted
tpm	three pointers made

Marreese Speights

Your job is to answer this question:

"Which player statistics best predict the players salaries?"

Mike Dunleavy
Photos from www.nba.com

This assignment requires you to construct your own report on this data with the members of your working group. Use the web to find more information about basketball and statistics. In your analysis plan (draft report) carefully delineate the data cleaning and processing, what variables you might create, whether you will plan on standardizing values by minutes played, whether you will remove players from the analysis who have played only a small amount of time during the season.

Follow the format used for Case Study 1 (Restaurant Tipping) for your report. You will need to present your results in tabular and graphical form, and concisely summarize the major findings. Please just use simple methods for this assignment, no more than regression, even though some multivariate methods might be appropriate you'll get opportunities to use these in the next assignment.

In keeping with doing reproducible research, you should also submit your R code and any modified data, so that I can re-do your analysis. Your report needs to be handed in on paper, and emailed to me.

The grade for the assignment will depend on neatness of the report, how comprehensive is the analysis (are your questions answered), clarity of results presentation, and preciseness of final conclusions, following the grading rubric provided.