

## Machine learning project proposal: NBA player shot analysis-- Steph Curry

### Description:

Try to visualize the player's shot in different situations, i.e. shot distance, competing against different team, whether the team is ahead or behind.

Try to find the best model to predict the player's shot is going to score or not.

But factors like defense the player faced, the lineup and basketball tactics deployed may be hard to quantify.

Methodology: Decision Tree may be preferred

### Data source:

Crawl data on website: <http://www.basketball-reference.com>

#### Stephen Curry 2014-15 Shooting

Split	Value	FG	FGA	FG%	3P	3PA	3P%	eFG%	Ast'd	%Ast'd
Season	Regular Season	14	28	.500	9	19	.474	.661	10	.714
Split	Value	FG	FGA	FG%	3P	3PA	3P%	eFG%	Ast'd	%Ast'd
Game Location	Home	6	12	.500	3	7	.429	.625	5	.833
	Road	8	16	.500	6	12	.500	.688	5	.625
Split	Value	FG	FGA	FG%	3P	3PA	3P%	eFG%	Ast'd	%Ast'd
Game Result	Win	6	12	.500	3	7	.429	.625	5	.833
	Loss	8	16	.500	6	12	.500	.688	5	.625
Split	Value	FG	FGA	FG%	3P	3PA	3P%	eFG%	Ast'd	%Ast'd
Shot Points	2	5	9	.556	0	0		.556	3	.600
	3	9	19	.474	9	19	.474	.711	7	.778
Split	Value	FG	FGA	FG%	3P	3PA	3P%	eFG%	Ast'd	%Ast'd
Shot Distance	At Rim	3	3	1.000	0	0		1.000	1	.333
	3 to <10 ft	0	1	.000	0	0		.000	0	
	10 to <16 ft	0	1	.000	0	0		.000	0	
	16 ft to <3-pt	2	4	.500	0	0		.500	2	1.000
	3-pt	9	19	.474	9	19	.474	.711	7	.778
Split	Value	FG	FGA	FG%	3P	3PA	3P%	eFG%	Ast'd	%Ast'd
Shot Type	Jump Shot	11	25	.440	9	19	.474	.620	9	.818
	Lay-Up	3	3	1.000	0	0		1.000	1	.333
Split	Value	FG	FGA	FG%	3P	3PA	3P%	eFG%	Ast'd	%Ast'd
Quarter	1st	2	5	.400	1	3	.333	.500	2	1.000
	2nd	0	1	.000	0	0		.000	0	

#### Shot Chart

