

Assignment 2

1a) Mean \rightarrow 0.424

95% credible set

\rightarrow 0.377 0.471

1b For season 2-5

Mean \rightarrow 0.453

95% credible set,

\rightarrow 0.439 0.467

For season 6-10

Mean \rightarrow 0.392

95% Credible set

\rightarrow 0.384 0.4

For season 11-15

Mean \rightarrow 0.416

95% Credible set

0.41 0.423

For season 16-20

Mean \rightarrow 0.416

95% Credible set

0.414 0.422

1c Bryan's best season was
season 6.

1d His shooting performance
determined by Fb%.

Shows a trend of increasing
and reaching max till season
6. Dropping and recovering

~~till~~ to ^{Season} level 6 ~~to~~ level till
 season 11. Post season 17,
 it drastically reduced. So,
 we can say ~~he was~~ his
 performance was decreasing when
 he retired.

2) a)

~~Mean $\rightarrow 0.164$~~

Posterior Mean $\rightarrow 0.164$

95% Credible Set,

0.112 ... 0.225

$$\frac{17+7.5}{17+7.5+17+7.5}$$

Prior Mean $\rightarrow 0.15$

Data Mean $\rightarrow 0.17$

So, posterior mean is
 clearly blue ~~0.16~~ 0.15 and
 0.17.

The credible set is comparatively wide. This is because the Variance for the proposal dist was set as 0.1, which is still wide. We got large no. of values, with this variance, ~~which~~ which were not centered around mean.

The histogram of the data looks like a Normal Dist centered around mean.

2b Results saved in folder.
Histogram ~~plot~~ plot.