Mixure Models

Evan Miller

Thursday, June 16, 2016

This R markdown document will highlight the process used to estimate a mixture model from the underlying population data. The data has:

* 8000 members;
* data generated from 2 separate beta distributions

I need to:

* Find the maximum likelihood estimate (MLE) for the parameters of each component beta distribution
* Find the percentage of the data coming from each component beta distribution (5 parameters in total).

summary(cars)

## speed dist   
## Min. : 4.0 Min. : 2.00   
## 1st Qu.:12.0 1st Qu.: 26.00   
## Median :15.0 Median : 36.00   
## Mean :15.4 Mean : 42.98   
## 3rd Qu.:19.0 3rd Qu.: 56.00   
## Max. :25.0 Max. :120.00

You can also embed plots, for example:



Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.