

Identifying effective variables on miles per gallon for mtcars dataset

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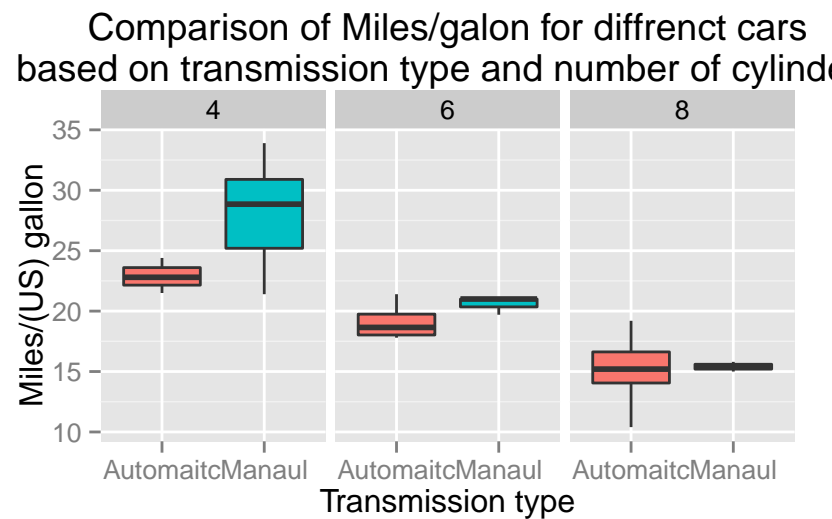
Summary

Is an automatic or manual transmission better for MPG?

Quantifying the MPG difference between automatic and manual transmissions

Data Processing

`ggpairs(data=mtcars,lower=list(continuous="smooth"),params=c(method="loess"))` i should do plot the mpg in different colors and different regression line



required packages we need to load required packages.

Results

source:

Basic Analysis

The dataset *mtcars* has 32 observations and 11 variables which describe different car characteristics.

Appendix

A: Data Source

Henderson and Velleman (1981), Building multiple regression models interactively. *Biometrics*, 37, 391-411.
-mpg: Miles/(US) gallon -cyl: Number of cylinders -disp: Displacement (cu.in.) -hp: Gross horsepower -drat: Rear axle ratio -wt: Weight (lb/1000) -qsec: 1/4 mile time -vs: V/S -am: Transmission (0 = automatic, 1 = manual) -gear: Number of forward gears -carb: Number of carburetors

B: Envirnoment Setup

- Windows 10 X64
- R version 3.2.2 (2015-08-14)
- Rstudio Version 0.98.1103