Machine learning for multiple linear regression

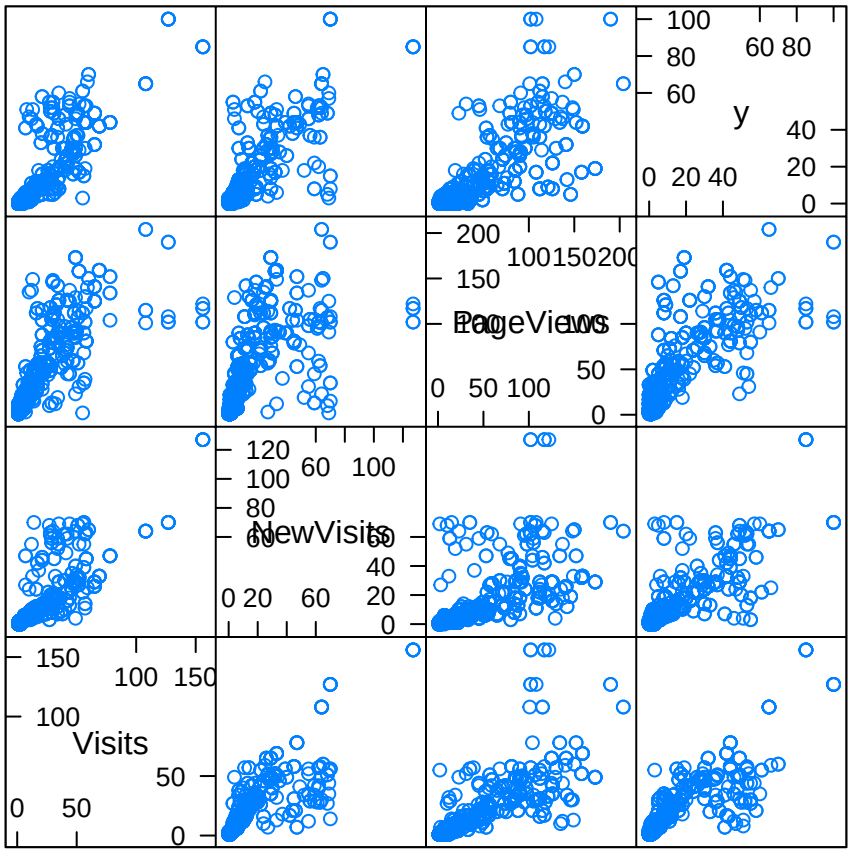
Multiple linear regression is a generalization of linear regression by considering more than one independent variable, and a specific case of general linear models formed by restricting the number of dependent variables to one.

Split data into training and testing chunks

```
[1] 643   9
```

```
[1] 273   9
```

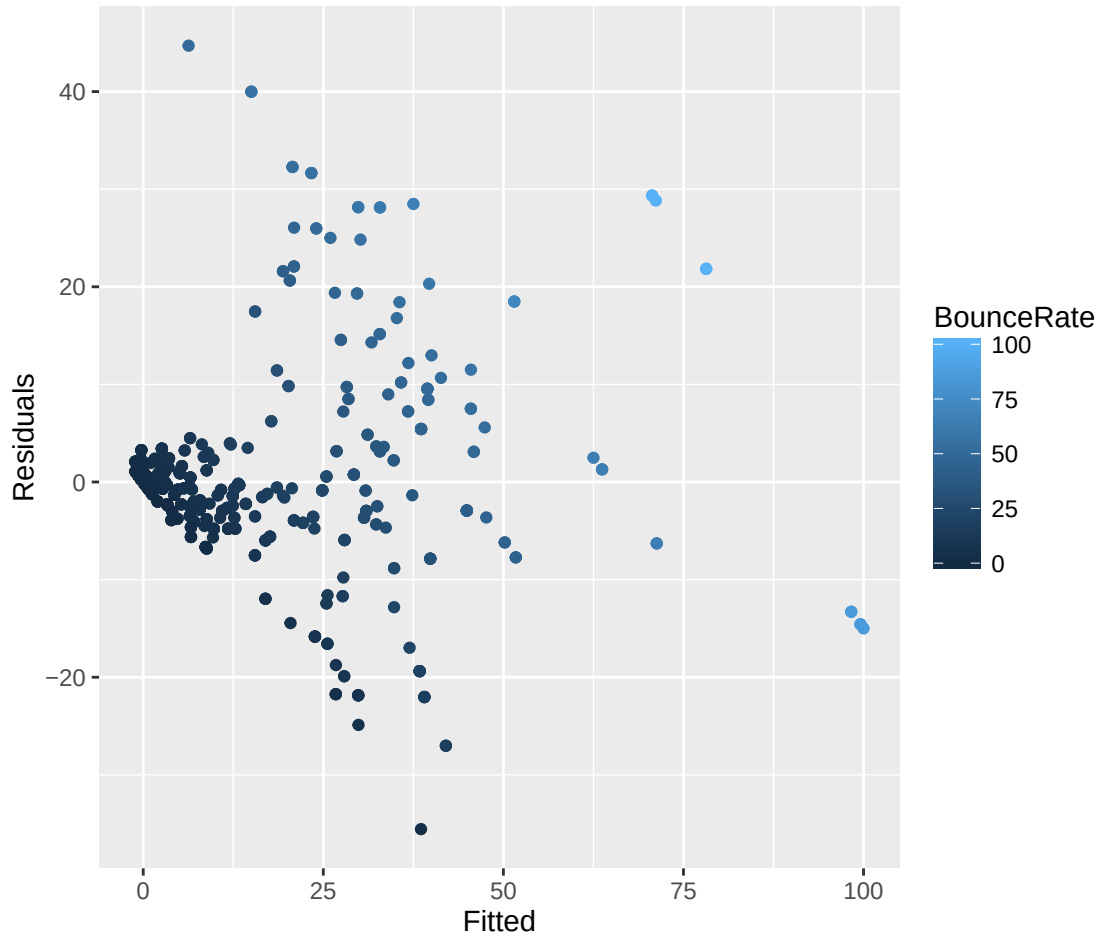
feature plot



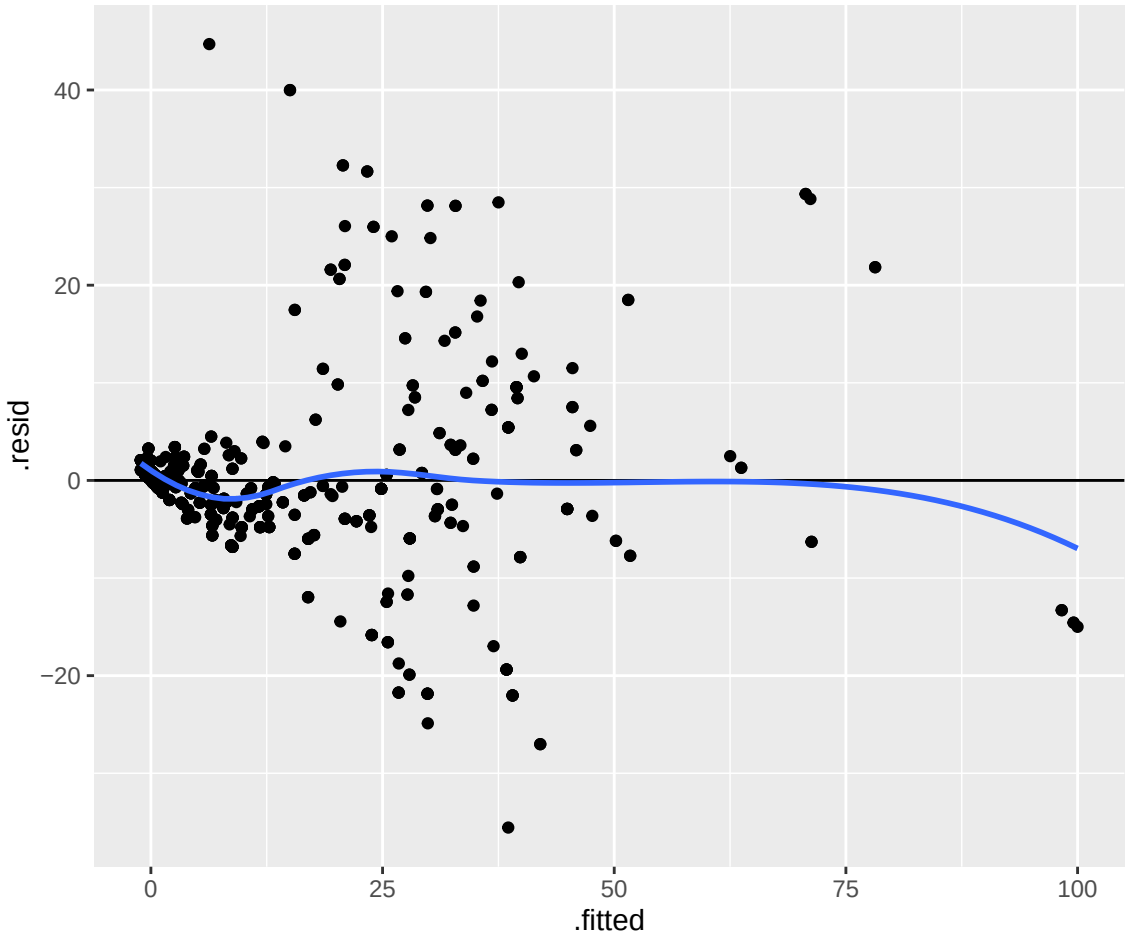
Fit a linear model

```
Linear Regression

643 samples
  8 predictor

No pre-processing
Resampling: Bootstrapped (25 reps)
Summary of sample sizes: 643, 643, 643, 643, 643, 643, ...
Resampling results:

  RMSE      Rsquared
  9.381028  0.7694436
```

Plot fitted versus residuals color by bounce rate



Plot fitted versus residuals



Predict training and testing datasets

```
        1         2         6         7         9        10
15.521165  5.762200  9.218444 12.657784 36.768761 10.673550

        3         4         5         8        11        13
 1.042009 14.505307 12.168198 33.398937 21.039587  1.600252
```

Plot predictive models