Equatiomatic

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```
library(equatiomatic)
head(mtcars)
```

```
##                    mpg cyl disp  hp drat    wt  qsec vs am gear carb
## Mazda RX4         21.0   6  160 110 3.90 2.620 16.46  0  1    4    4
## Mazda RX4 Wag     21.0   6  160 110 3.90 2.875 17.02  0  1    4    4
## Datsun 710        22.8   4  108  93 3.85 2.320 18.61  1  1    4    1
## Hornet 4 Drive    21.4   6  258 110 3.08 3.215 19.44  1  0    3    1
## Hornet Sportabout 18.7   8  360 175 3.15 3.440 17.02  0  0    3    2
## Valiant           18.1   6  225 105 2.76 3.460 20.22  1  0    3    1
```

```
mod1 <- lm(mpg ~ cyl + disp, mtcars) #super simple lm
summary(mod1)
```

```
##
## Call:
## lm(formula = mpg ~ cyl + disp, data = mtcars)
##
## Residuals:
##     Min     1Q  Median     3Q     Max
## -4.4213 -2.1722 -0.6362  1.1899  7.0516
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept) 34.66099    2.54700  13.609 4.02e-14 ***
## cyl         -1.58728    0.71184  -2.230   0.0337 *
## disp        -0.02058    0.01026  -2.007   0.0542 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 3.055 on 29 degrees of freedom
## Multiple R-squared:  0.7596, Adjusted R-squared:  0.743
## F-statistic: 45.81 on 2 and 29 DF,  p-value: 1.058e-09
```

```
#betas and significance of different terms
#Package helps with visualization
```

```
extract_eq(mod1) #spite out the latex code
```

$$\text{mpg} = \alpha + \beta_1(\text{cyl}) + \beta_2(\text{disp}) + \epsilon \tag{1}$$

```
extract_eq(mod1, use_coefs = TRUE) #Same code but puts in specific estimates
```

$$\widehat{\text{mpg}} = 34.66 - 1.59(\text{cyl}) - 0.02(\text{disp}) \tag{2}$$