

# Cheatography

## ggvis\_18BCE2193 Cheat Sheet by Anshumaan Singh (Anshumaan Singh) via cheatography.com/126462/cs/24498/

### Installation

```
install.packages("ggvis")
```

```
library(ggvis)
```

install.packages("ggvis") will install all the required packages you need for visualization through ggvis

-library(ggvis) will call the ggvis package to be used in your visualization

### Layers

Simple Layer	Multiple Layer
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Here I am using the dataset mtcars and visualising it through layer points.

I have taken the mtcars dataset and visualized the multiple layers using different strokes

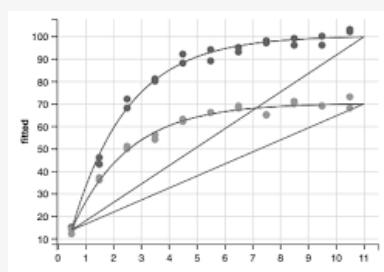
### Global Vs Local properties

A property that is set inside ggvis() is applied globally. While a property set inside layer\_marks() is applied locally. Local properties can override global properties when applicable.

### Scale Types

Any visual property in the visualization can be adjusted with scale(). ggvis provides several different functions for creating scales:

### Model Prediction



```
faithful %>%
```

```
ggvis(~eruptions,~waiting)
```

```
%>%
```

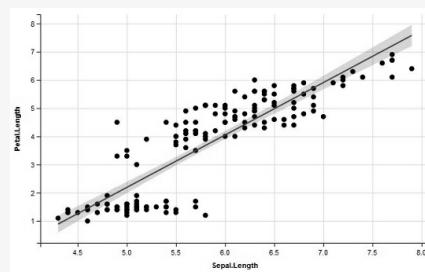
```
layer_points(fill := "green", fillOpacity := 0.5) %>% layer_model_predictions(-model = "lm", stroke := "red") %>%  
layer_smooths(stroke := )
```

### Overview

### Graphics

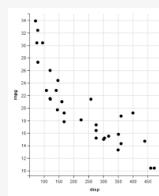
The graphics produced by ggvis are fundamentally web graphics and work very differently from traditional R graphics. This allows us to implement exciting new features like interactivity. The goal of ggvis is to make it easy to build interactive graphics for exploratory data analysis. ggvis has a similar underlying theory to ggplot2 (the grammar of graphics).

### Simple Layer



```
mtcars %>% ggvis(~mpg, ~disp, fill = ~vs) %>% layer_points()
```

### Scale Types (cont)



```
scale_datetime(),  
scale_logical(),  
scale_nominal(),  
scale_numeric(),  
scale_singular()  
Code faithful %>% ggvis(~eruptions,~waiting, fill = ~eruptions) %>% layer_points() %>% scale_numeric("fill", range)
```

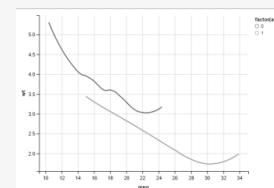
### More about ggvis

- 1.Differences and similarities to ggplot2.
- 2.The relationship between ggvis and Vega

### Popular In-Built plot types

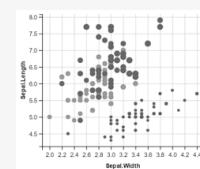
1. layer\_points()
2. layer\_lines()
3. layer\_bars()
4. layer\_smooths()
5. layer\_histograms()

### Multiple Layer



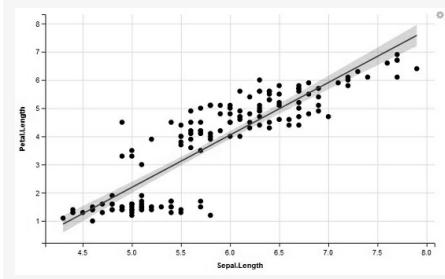
```
mtcars %>% ggvis(~wt, ~mpg) %>% layer_smooths(span = 1) %>% layer_smooths(span = 0.3, stroke := "- red")
```

### ggvis & interaction ()



```
train_tbl %>% group_by(season,holiday) %>% ggvis(~count, fill = ~interaction(season,holiday)) %>%
```

### Interactive Plots



ggvis comes several

input\_checkbox(), input\_checkboxgroup, input\_numeric(), input\_radiobuttons(), input\_select(), input\_slider(), and inp

label = "ABCD ", cho black" -  
value = "black" - Use text()  
map = as.name used to return variable nam

Are the common argu these functions.

The goal is to combine the best of R (e.g. every modelling function you can imagine) and the best of the web (everyone has a web browser). Data manipulation and transformation are done in R, and the graphics are rendered in a web browser, using Vega. For RStudio users, ggviz graphics display in a viewer panel, which is possible because RStudio is a web browser.



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