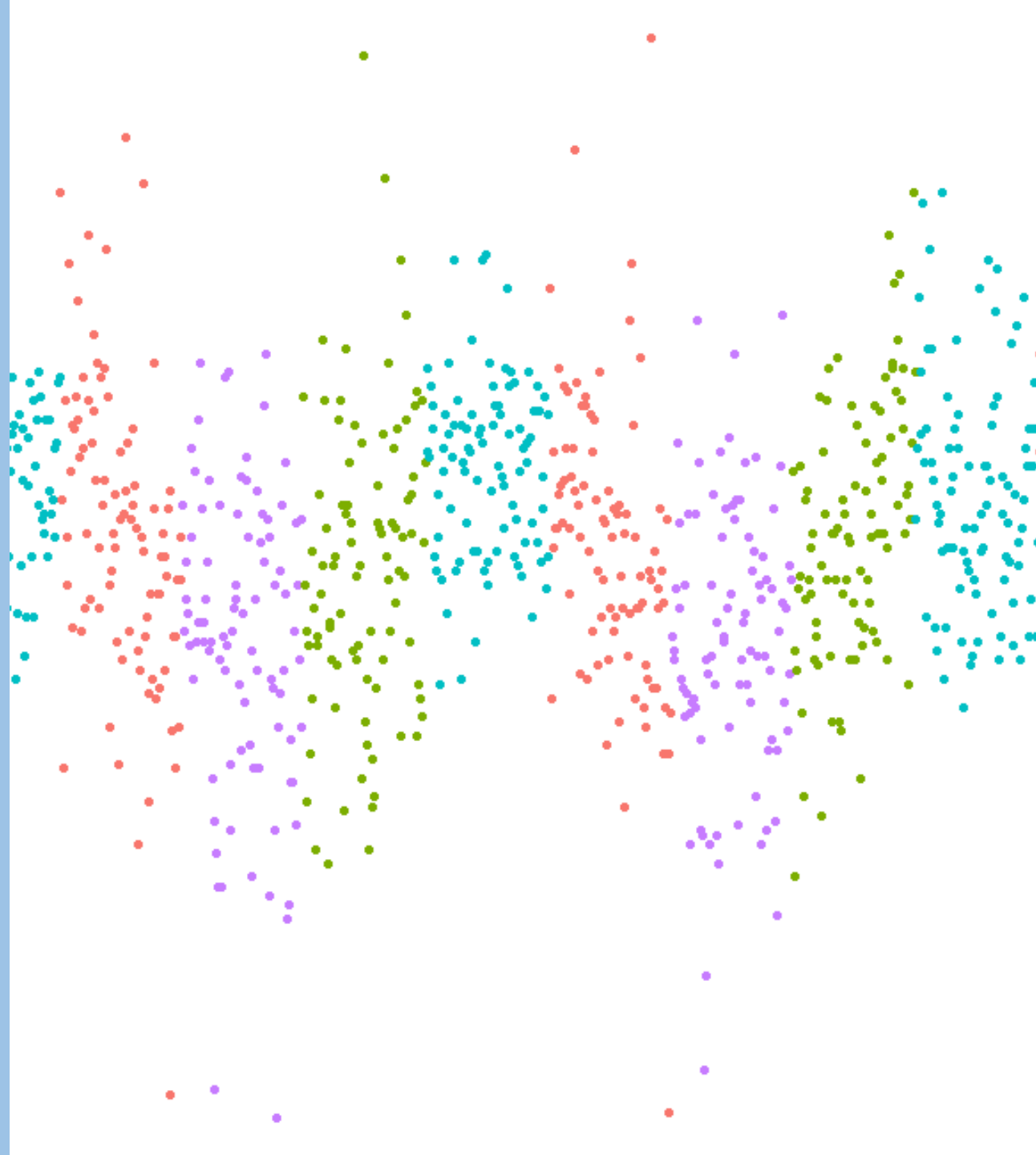


Speak Visually!

data visualization in R with ggplot2

Judit Mokos | mokjud@gmail.com



please

close your eyes

what makes
a good figure
good?

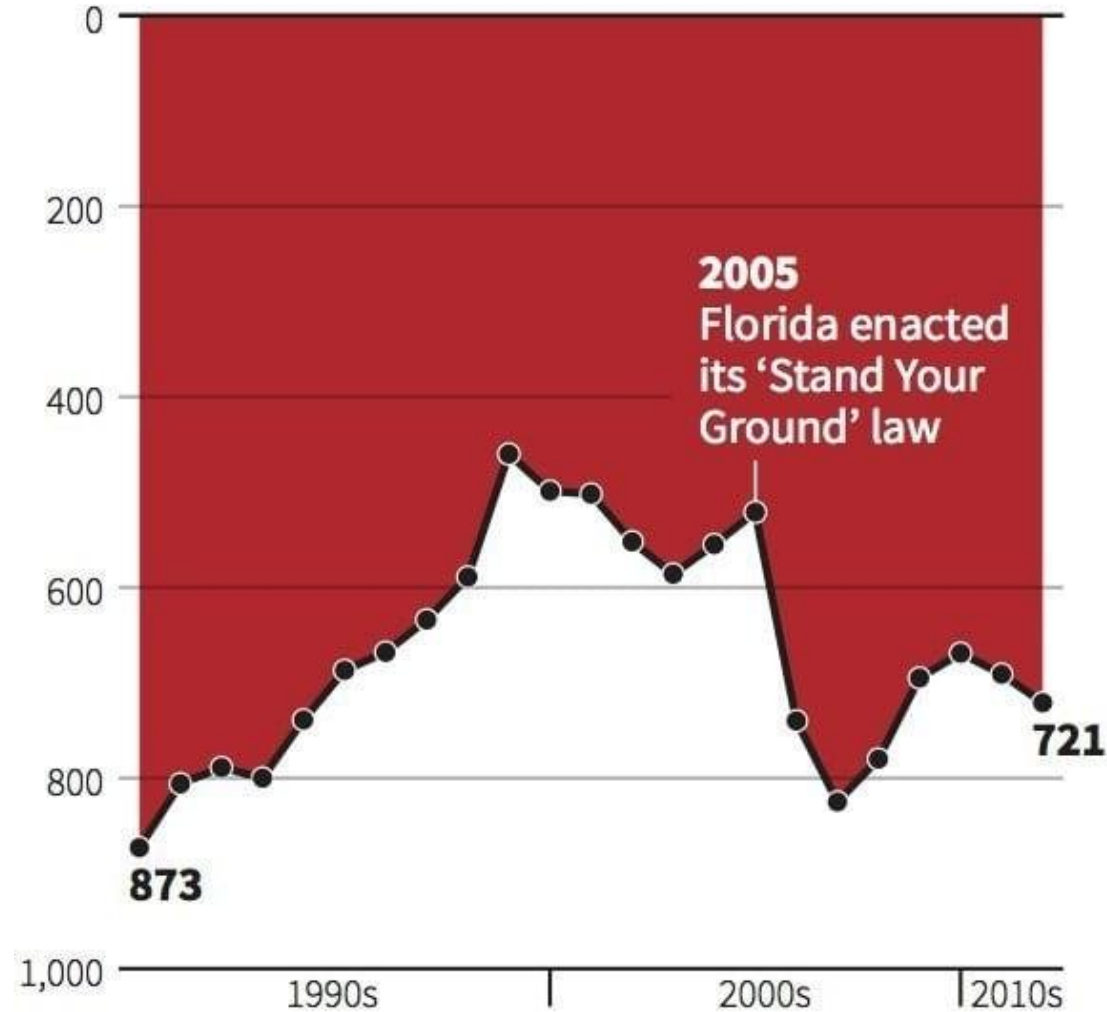
what makes
a good figure
good?

data
intuitive
simply, but enough
information
clear and pretty
piechart is forbidden
2D
right colors and shapes
message

what makes
a bad figure
bad?

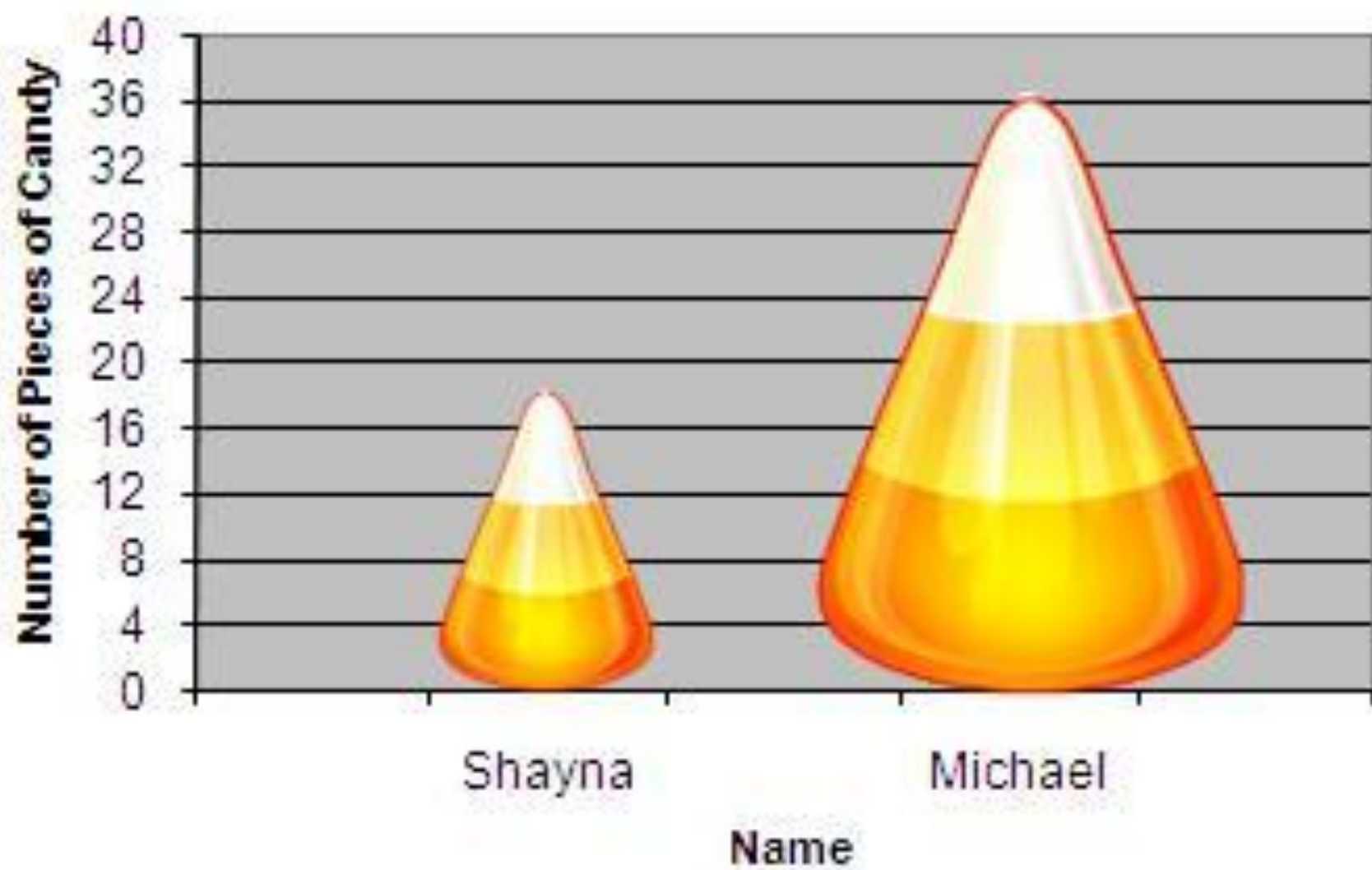
Gun deaths in Florida

Number of murders committed using firearms



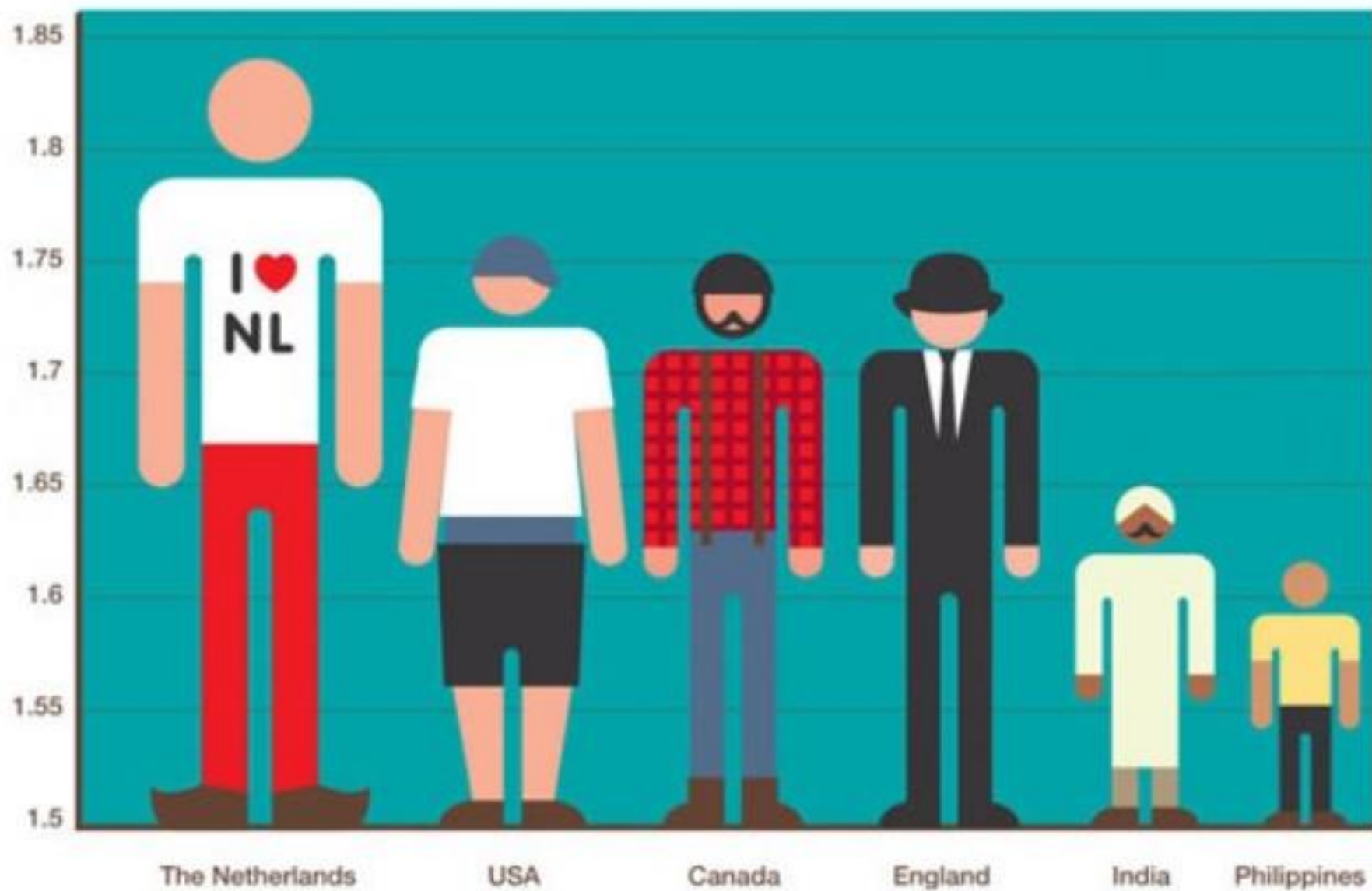
Source: Florida Department of Law Enforcement

Halloween Candy Collected



LOOKING DOWN ON THE REST OF THE WORLD

(Average male height in m)



DELINCUENCIA

Victimización (hogares víctimas de delitos en 12 meses)



this is Pintera



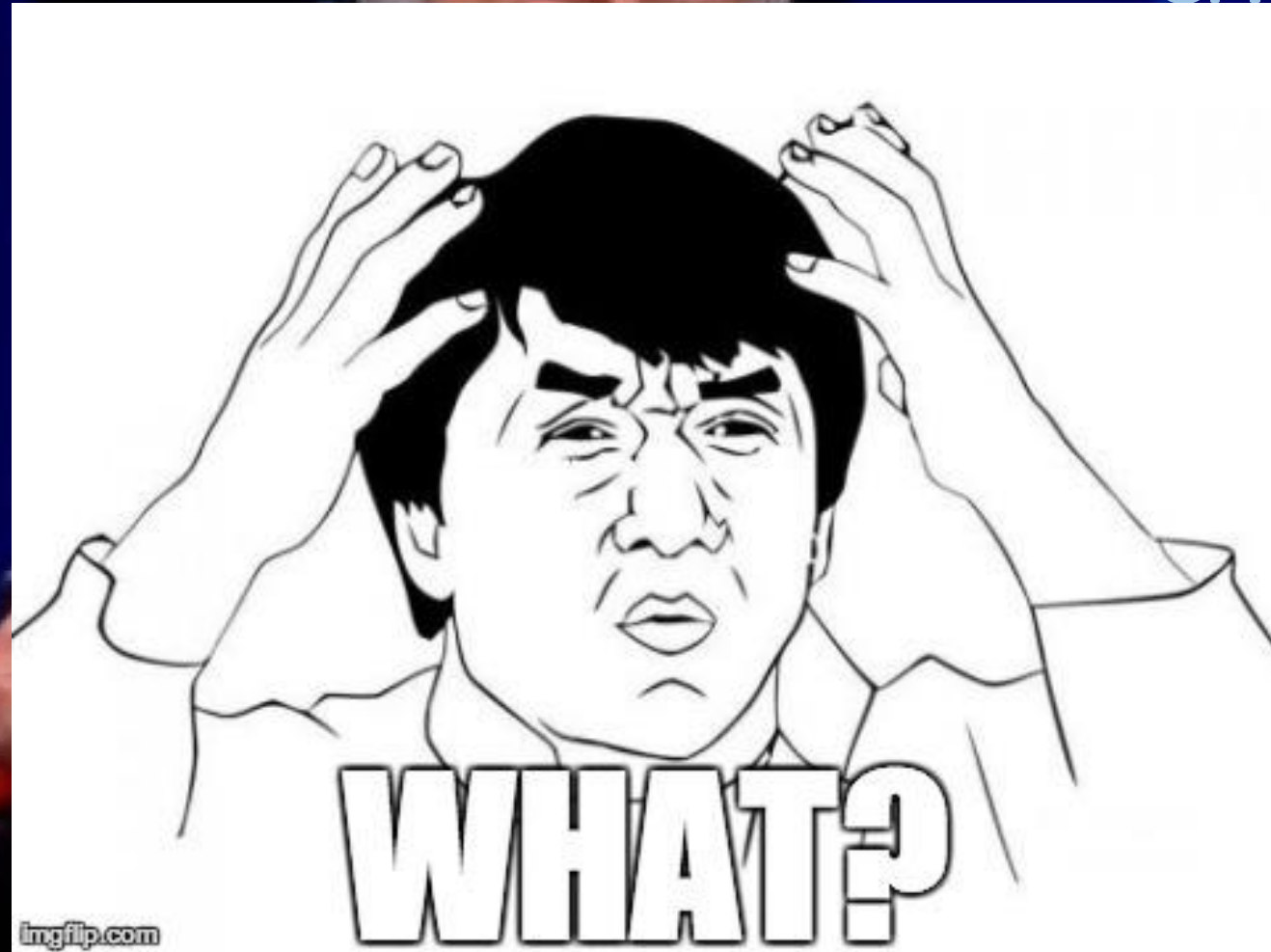
this is Piner

and he
won the
Chilean
election



he is Pintera

and he
on the
hilean
ection



is the crime
rate in Boston
dependent on
the weather?

is the crime
rate in Boston
dependent on
the weather?

collected data:

- 7 july 2012 – 26 february 2017 every day
- date
- number of crimes per day
- the type of the crimes
- average, minimum, maximum temperature
- snow
- rain
- any unusual events

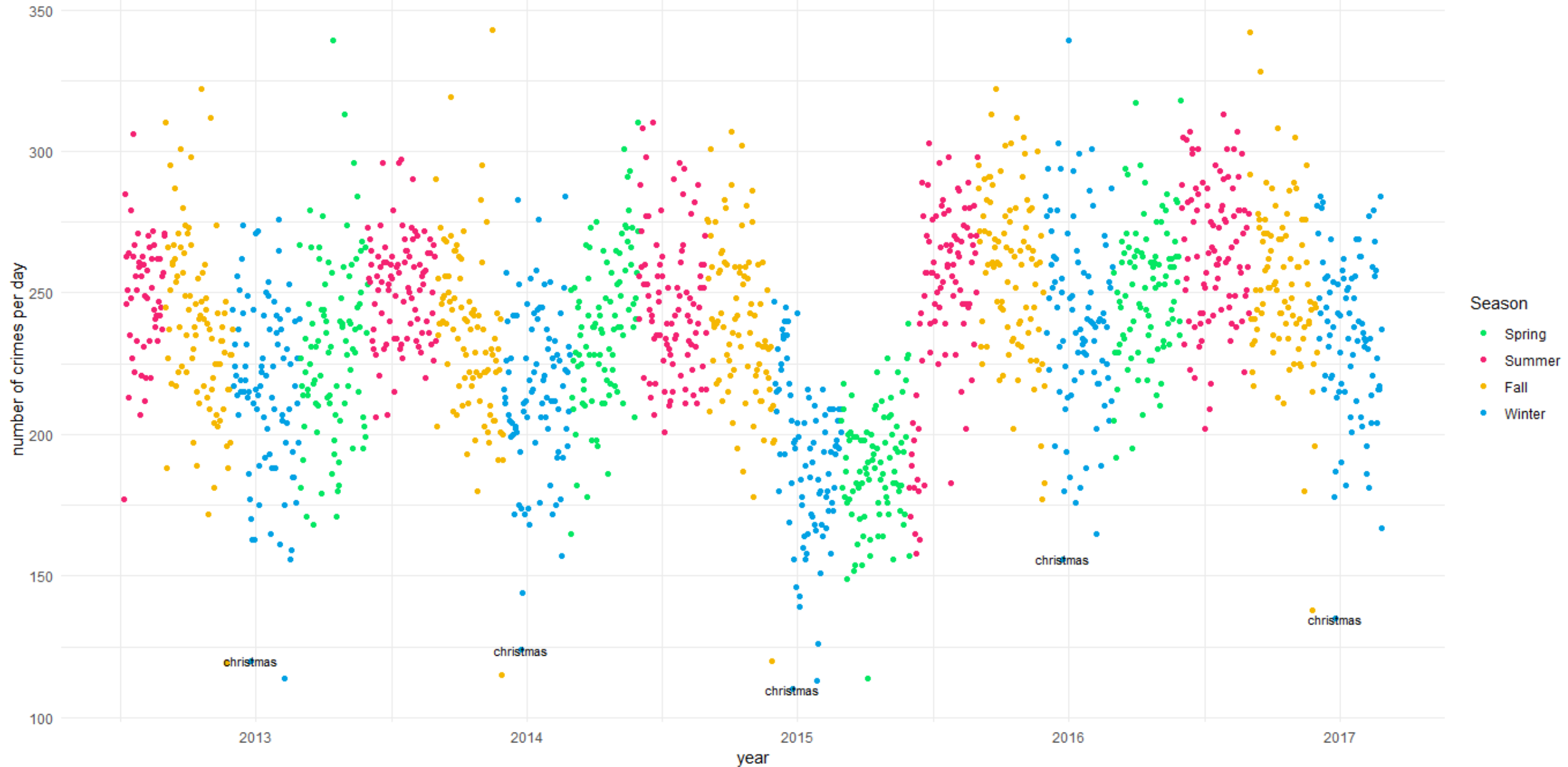
is the crime
rate in Boston
dependent on
the weather?

make a graph
by hand!

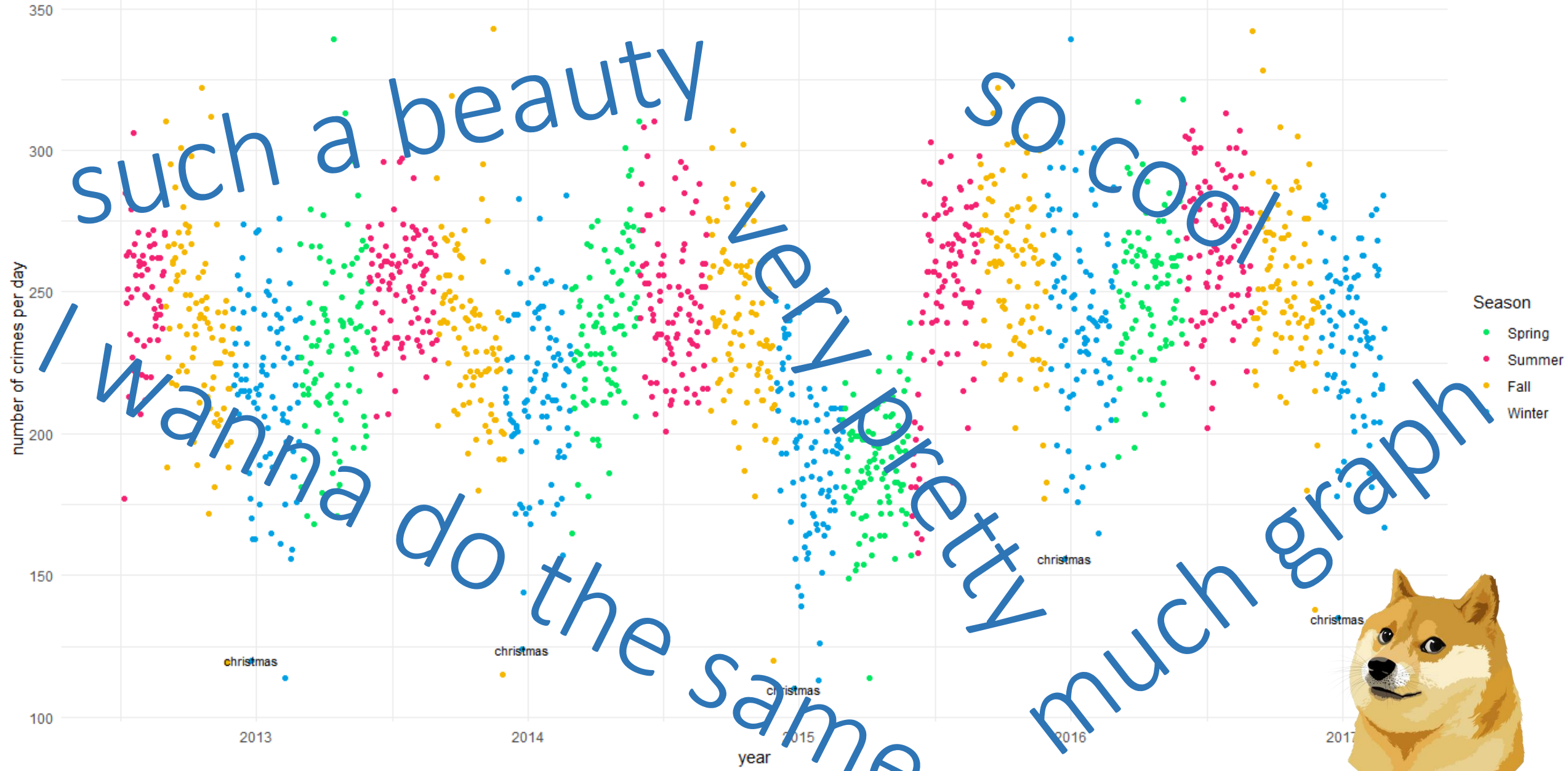
collected data:

- 7 july 2012 – 26 february 2017 every day
- date
- number of crimes per day
- the type of the crimes
- average, minimum, maximum temperature
- snow
- rain
- any unusual events

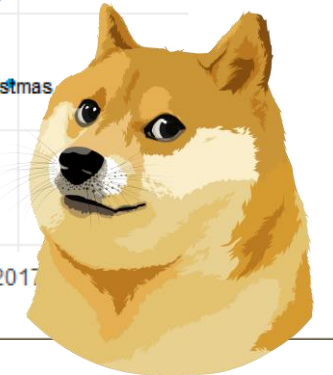
Crimes in Boston



Crimes in Boston



Season
● Spring
● Summer
● Fall
● Winter



Download:
github.com/mokjud/speak-visually

Open RStudio

The screenshot shows the GitHub repository page for 'speak-visually' by user 'mokjud'. The repository has 0 releases and 1 contributor. The 'Clone or download' button is highlighted with an orange circle. A dropdown menu is open, showing the 'Clone with HTTPS' option selected. The URL 'https://github.com/mokjud/speak-visually' is displayed in a text box with a copy icon. Below the dropdown, the 'Download ZIP' button is also highlighted with an orange circle. The repository name 'speak-visually' is visible in the top right corner of the page.

0 releases 1 contributor

Create new file Upload files Find file Clone or download

Clone with HTTPS ⓘ
Use Git or checkout with SVN using the web URL.

https://github.com/mokjud/speak-visually

Open in Desktop Download ZIP

speak-visually

2 days ago

please

forget

the syntax of R

```
ggplot(data, aes(x, y, color, fill) )
```

```
+
```

```
geom_point() geom_smooth, geom_line, geom_boxplot, geom_hist
```

```
scale_x_discrete(values, breaks, labels,  
name) scale_y, scale_color, scale_fill, scale_x_continuous, scale_x_manual, scale_x_date
```

```
labs(title, x, y)
```

```
theme_minimal()
```

```
data type, long format
```

challenge!

are basketball
players really
tall?

work in groups

- use the right figure-type
- use nice colors
- use title and axis labels

collected data:

- heights of professional basketball players
- heights of professional football players

lets play with R

any questions?
ask me!

download a
dataset,
choose a
question, or
make a question,
or play with your
own data :)

thank you for
coming!

Judit Mokos

mokjud@gmail.com

 @vackorfa