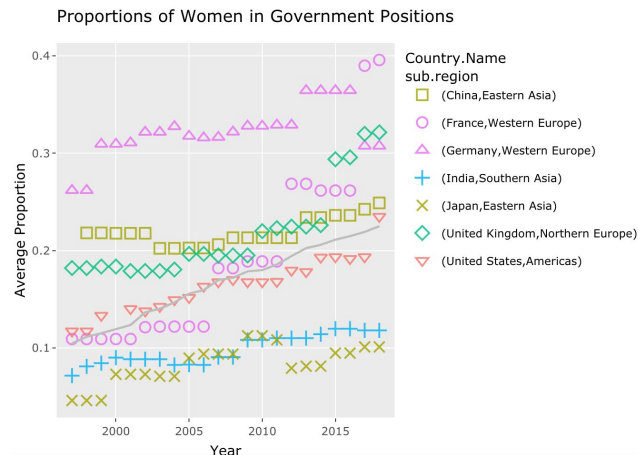


# DATA VISUALIZATION IN RSTUDIO

Pre-HackHERS 2022 Workshop #2

# Agenda

- Why data visualization?
- Overview of project
- Searching for data
- RStudio
- Publishing your work
- Further inspiration





# Why Data Visualization?

**01.**

## **Tell a story**

A picture is worth a thousand words.

**02.**

## **Data's everywhere**

All aspects of life have some associated data.

**03.**

## **Summarize**

Take complex things, make them accessible.

**04.**

## **Detect patterns**

See and identify trends and anomalies.

**05.**

## **Share Info**

Beautiful things are meant to be shared!

**06.**

## **Make Predictions**

Data can provide insights into the future.





# Today...



We'll be working with data on women in leadership to visualize how the US compares to other countries in terms of representation. Then, we will publish our work for others to view.





# Searching for Data



Start with sites dedicated to datasets:

- [datasetsearch.research.google.com/](https://datasetsearch.research.google.com/)
- [kaggle.com/datasets](https://kaggle.com/datasets)
- [public.opendatasoft.com/explore/](https://public.opendatasoft.com/explore/)

Use keywords and filters to narrow your search.



# Links for Today's Workshop



- <https://rstudio.cloud/> -> Must create an account
- <https://github.com/SamanthaLLee/Pre-HackHERS-R-Viz>
- <https://rpubs.com/> -> Must create an account



# Follow Along w/ Sam on Youtube :)



Now, we'll go into the hands-on part of the tutorial.

# Background

Many boast America to be the land of the free. But is its population truly represented in government? Let's compare the numbers.

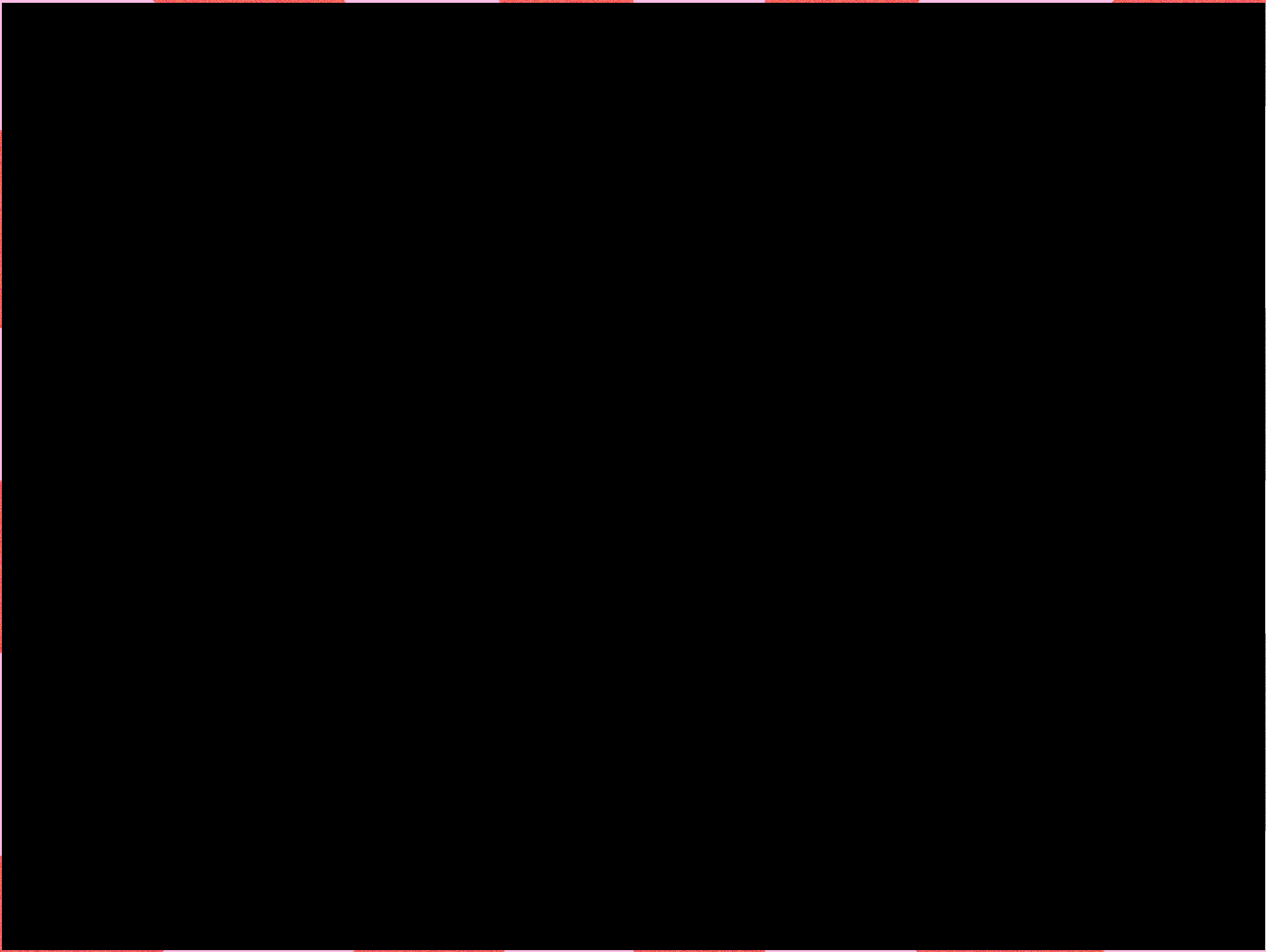
Here is a summary of the global data on female political representation:

```
## Country.Name      Country.Code      Year
## Length:4945      Length:4945      Min.   :1997
## Class :character  Class :character  1st Qu.:2002
## Mode  :character  Mode  :character  Median :2008
##                                     Mean   :2008
##                                     3rd Qu.:2014
##                                     Max.   :2019
##
## Proportion.of.seats.held.by.women.in.national.parliaments...
## Min.   :0.00000
## 1st Qu.:0.09673
## Median :0.16071
## Mean   :0.17100
## 3rd Qu.:0.22449
## Max.   :0.63750
## NA's   :152
```

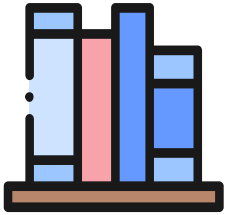
Here is a summary of countries and their regions:

```
##      name      alpha.2      alpha.3      country.code
## Length:249    Length:249    Length:249    Min.   : 4.0
## Class :character  Class :character  Class :character  1st Qu.:218.0
```



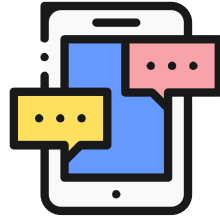


# Further Inspiration



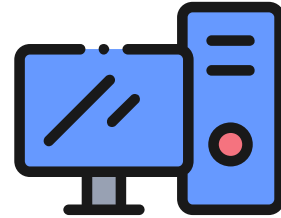
## The R Graph Gallery

<https://www.r-graph-gallery.com/>



## r/dataisbeautiful

<https://www.reddit.com/r/dataisbeautiful/>



## Information is Beautiful

<https://informationisbeautiful.net/>





# THANKS!

Register for HackHERS @  
<https://ruhackhers.org>

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