



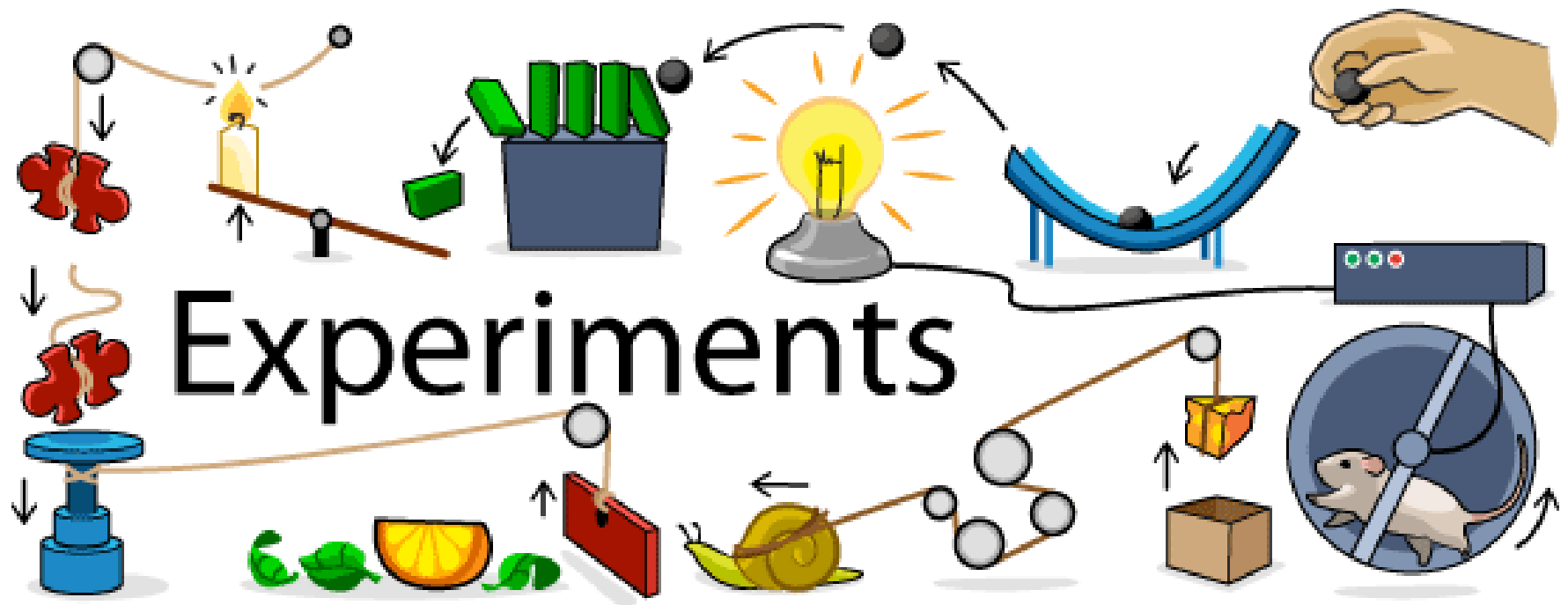
**UNIVERSIDADE FEDERAL DE RORAIMA**



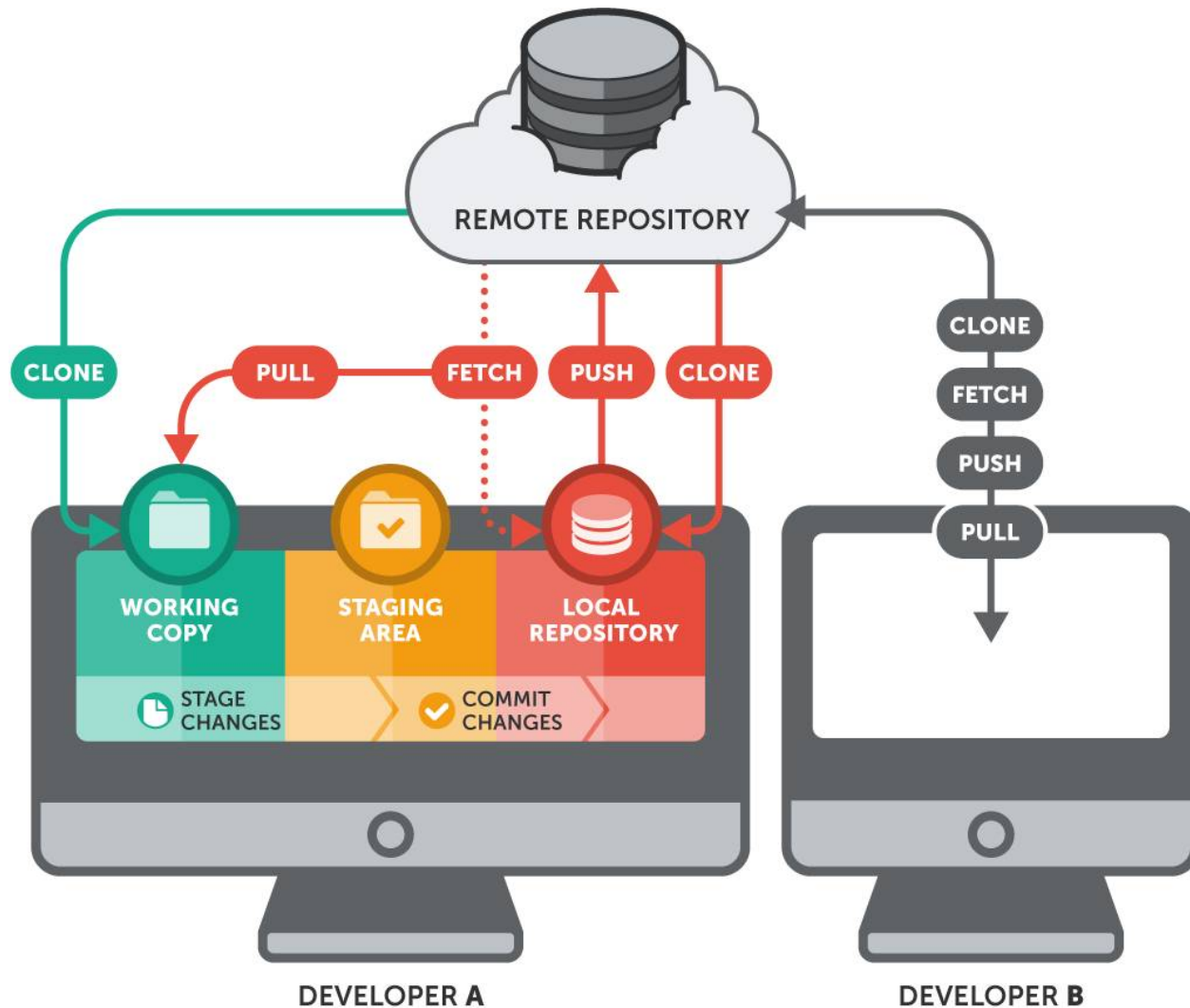
## **Experimentos: Análise de Algoritmos na Prática**

**Prof. Dr. Herbert Oliveira Rocha**  
**herberthb12@gmail.com**

# Experimentos

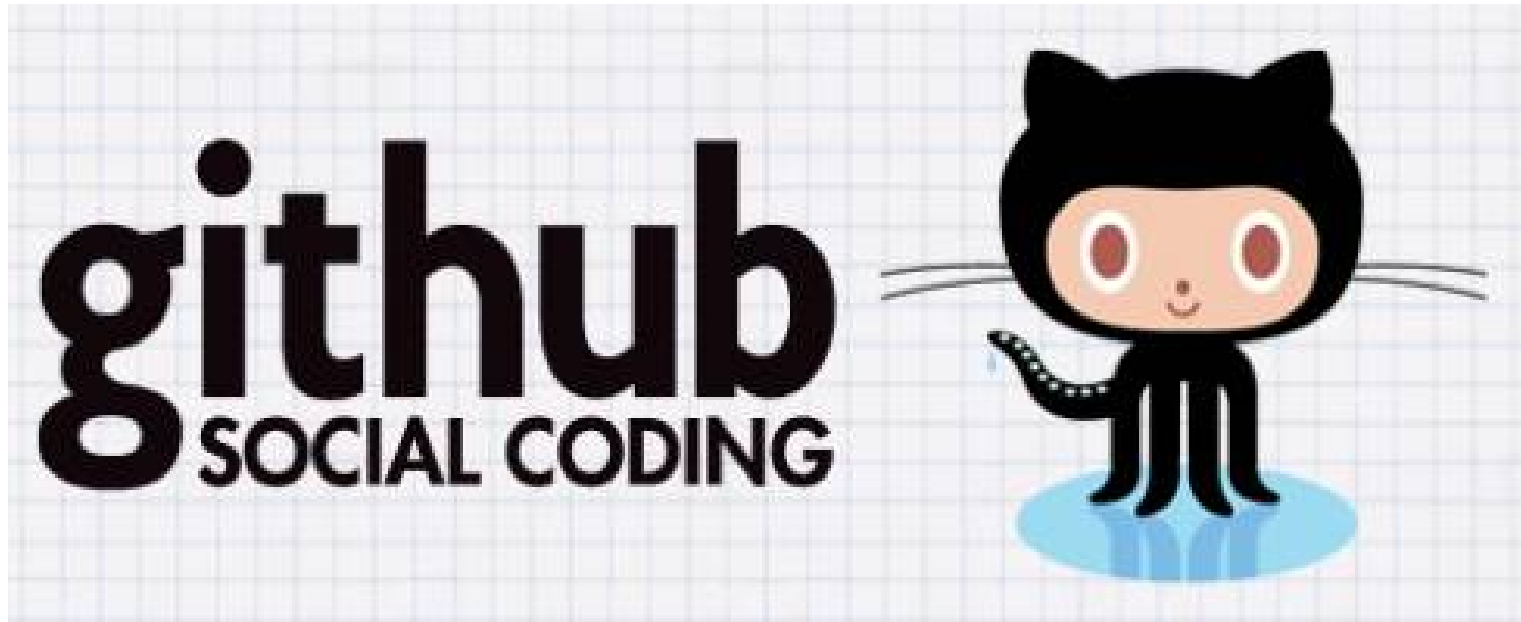


# Um pausa para preparar o ambiente



# Um pausa para preparar o ambiente

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# Um pausa para preparar o ambiente

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- Linha de comando: (onde verb = config, add, commit, etc.)

\$ git help <verb>

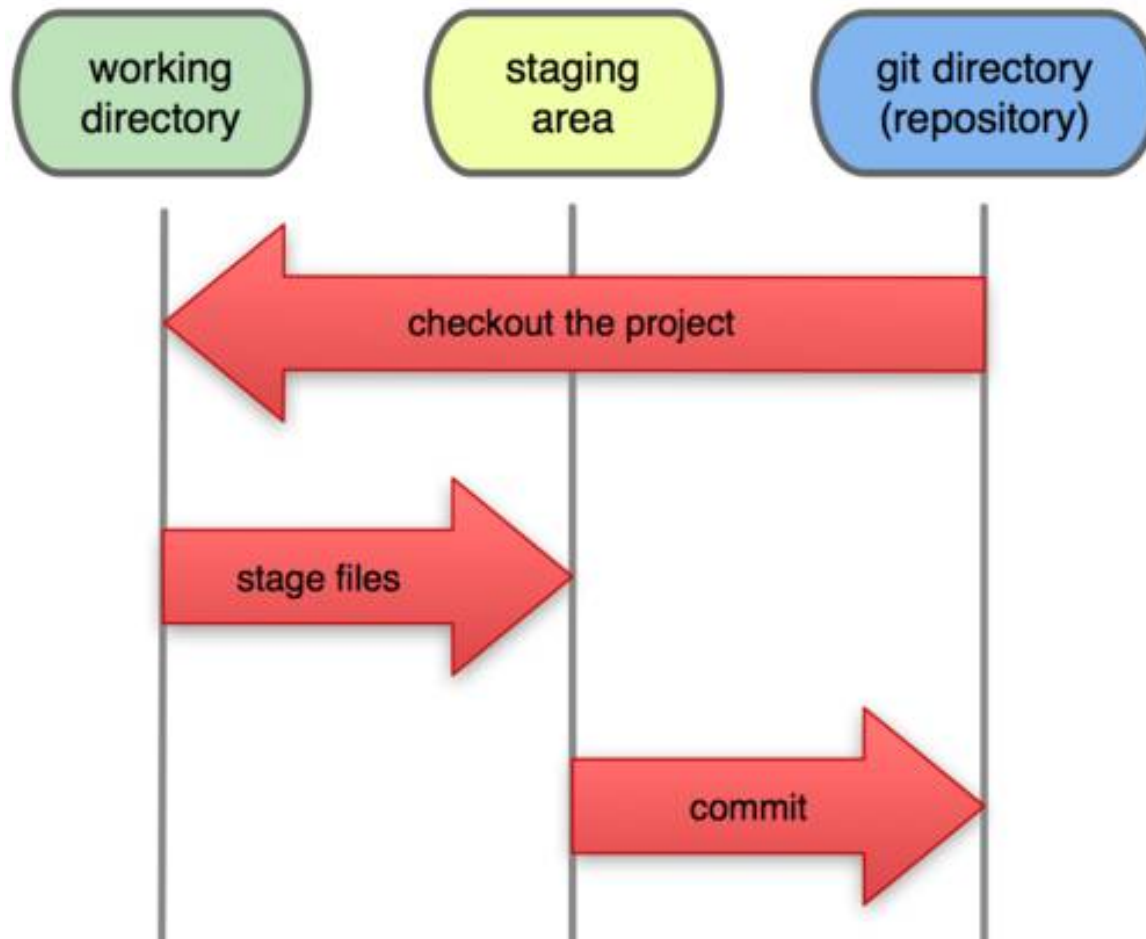
\$ git <verb> --help

\$ man git-<verb>

- Free on-line book: <http://git-scm.com/book>
- Git tutorial: <http://schacon.github.com/git/gittutorial.html>
- Reference page for Git: <http://gitref.org/index.html>
- Git website: <http://git-scm.com/>
- Git for Computer Scientists (<http://eagain.net/articles/git-for-computer-scientists/>)

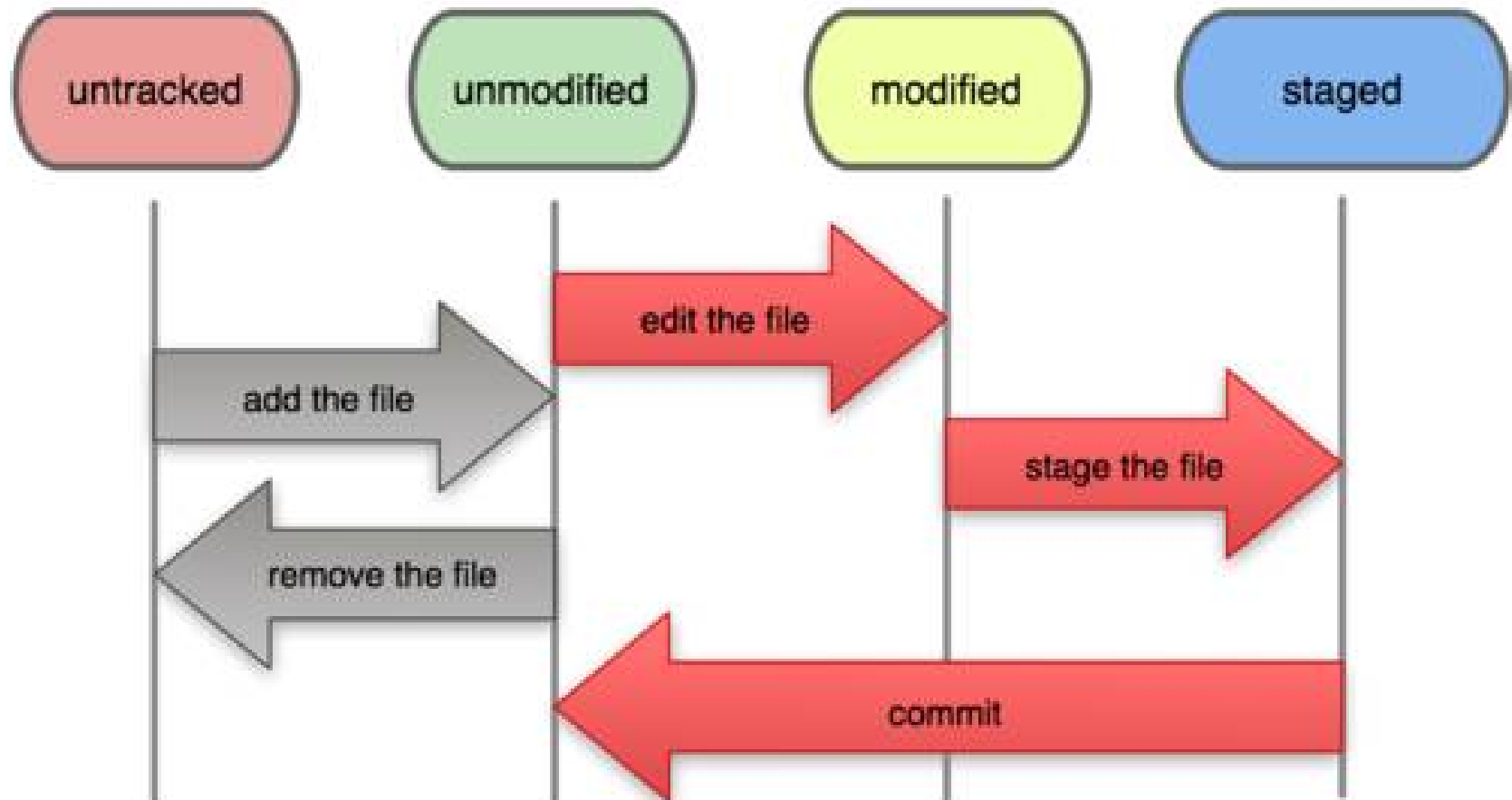
# Um pausa para preparar o ambiente

## Local Operations



# Um pausa para preparar o ambiente

## File Status Lifecycle



# Um pausa para preparar o ambiente

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## 1. Configurando o ambiente para os commit:

```
$ git config --global user.name "Bugs Bunny"
```

```
$ git config --global user.email bugs@gmail.com
```

- Teste `git config --list`



# Um pausa para preparar o ambiente

command	description
<code>git clone <i>url</i> [<i>dir</i>]</code>	copy a git repository so you can add to it
<code>git add <i>files</i></code>	adds file contents to the staging area
<code>git commit</code>	records a snapshot of the staging area
<code>git status</code>	view the status of your files in the working directory and staging area
<code>git diff</code>	shows diff of what is staged and what is modified but unstaged
<code>git help [<i>command</i>]</code>	get help info about a particular command
<code>git pull</code>	fetch from a remote repo and try to merge into the current branch
<code>git push</code>	push your new branches and data to a remote repository
others: <code>init</code> , <code>reset</code> , <code>branch</code> , <code>checkout</code> , <code>merge</code> , <code>log</code> , <code>tag</code>	

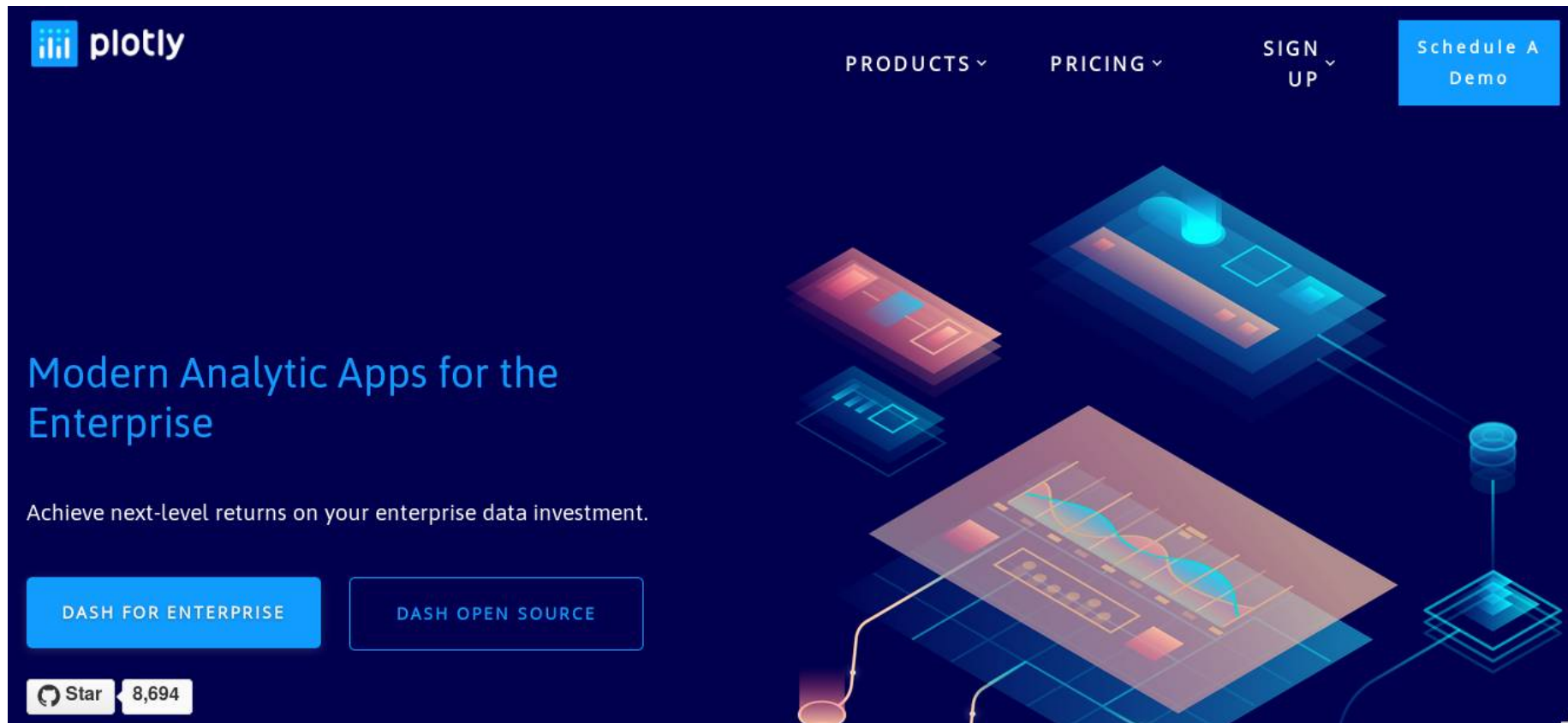
# Um pausa para preparar o ambiente

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# Um pausa para preparar o ambiente

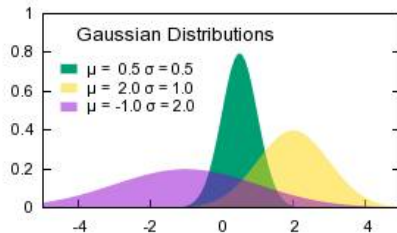
<https://plot.ly/create>



<https://plot.ly/r/getting-started/#initialization-for-offline-plotting>

# Um pausa para preparar o ambiente

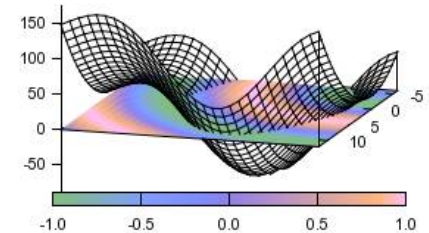
<http://www.gnuplot.info/>



## gnuplot homepage

[FAQ](#)  
[Documentation](#)  
[Demos](#)  
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[External Links](#)  
[Tutorials and guides](#)  
[Books](#)



**Gnuplot** is a portable command-line driven graphing utility for Linux, OS/2, MS Windows, OSX, VMS, and many other platforms. The source code is copyrighted but freely distributed (i.e., you don't have to pay for it). It was originally created to allow scientists and students to visualize mathematical functions and data interactively, but has grown to support many non-interactive uses such as web scripting. It is also used as a plotting engine by third-party applications like Octave. Gnuplot has been supported and under active development since 1986.

### Gnuplot supports many different types of 2D and 3D plots

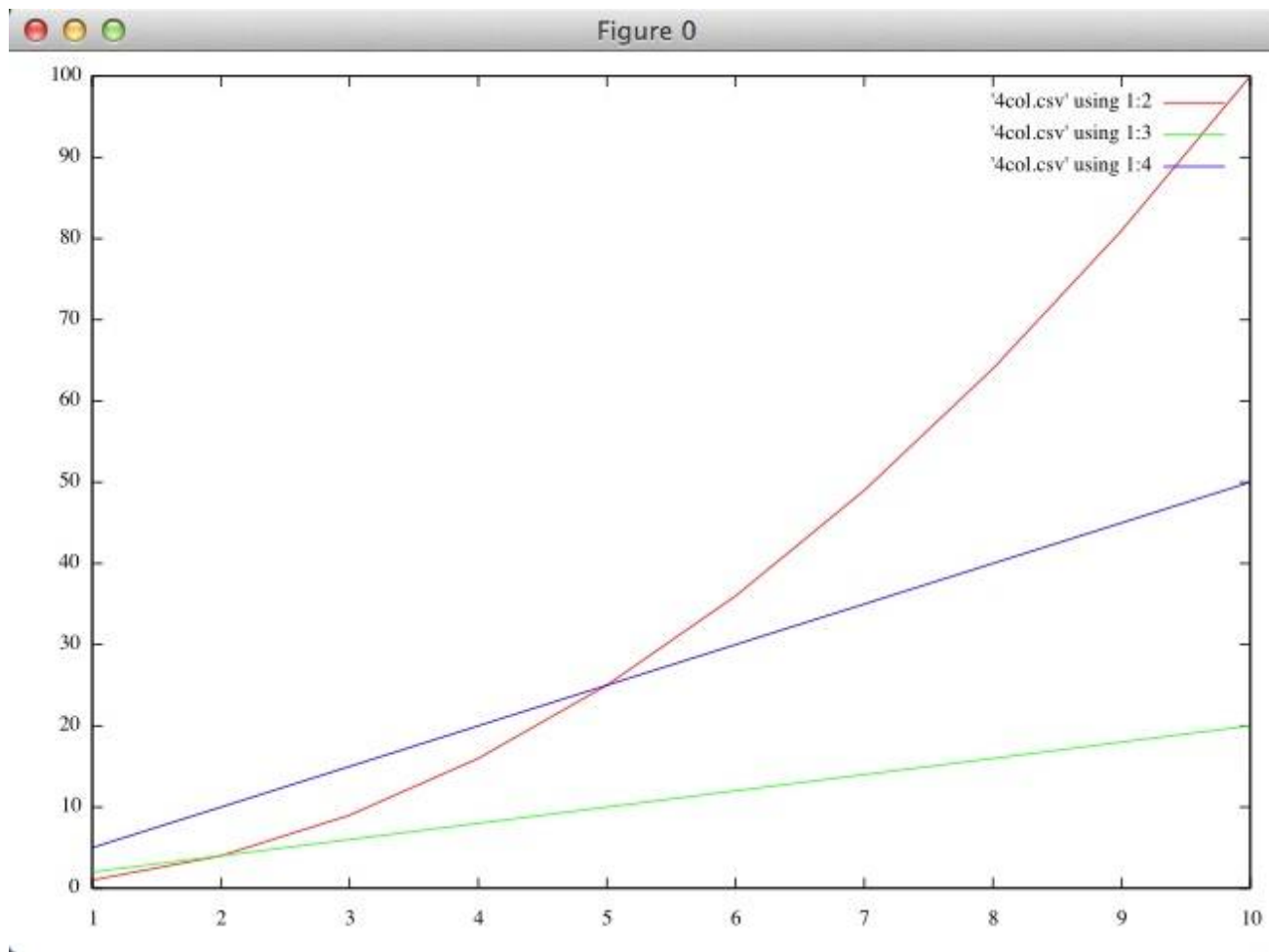
Here is a [Gallery of demos](#).

### Gnuplot supports many different types of output

interactive screen display:	cross-platform (Qt, wxWidgets, x11) or system-specific (MS Windows, OS/2)
direct output to file:	postscript (including eps), pdf, png, gif, jpeg, LaTeX, metafont, emf, svg, ...
mouseable web display formats:	HTML5, svg

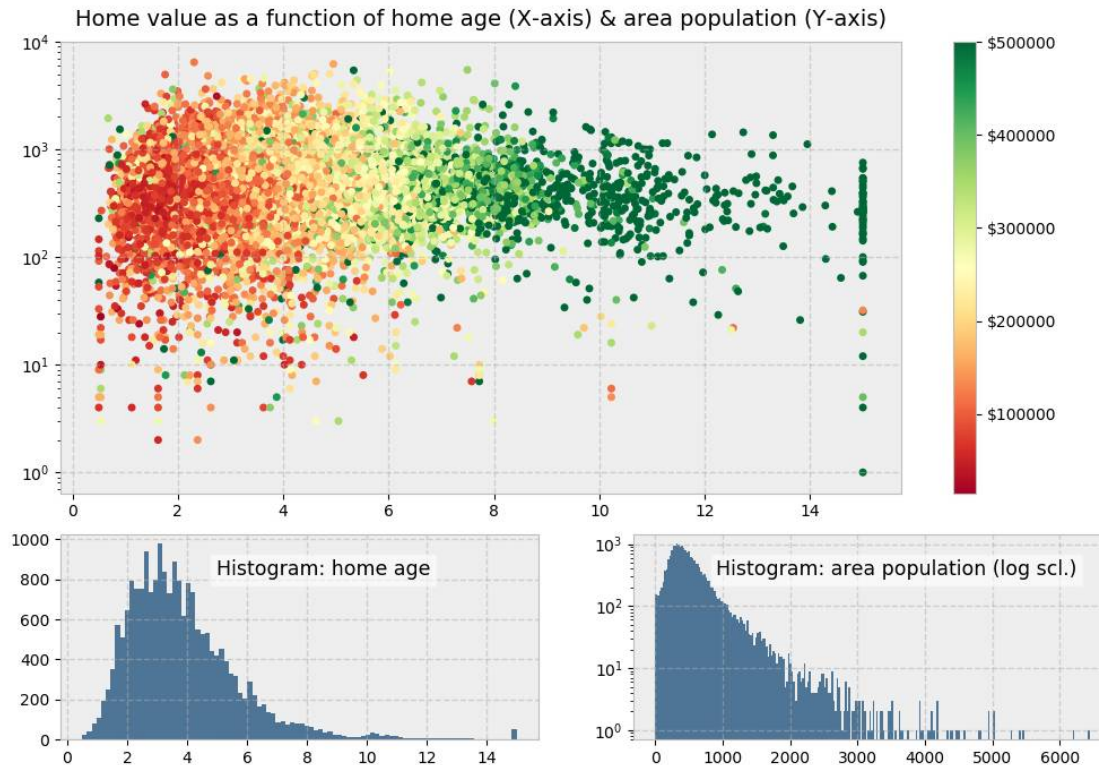
# Um pausa para preparar o ambiente

<https://alvinalexander.com/technology/gnuplot-charts-graphs-examples>



# Um pausa para preparar o ambiente

## Python com Matplotlib



<https://realpython.com/python-matplotlib-guide/>

# Um pausa para preparar o ambiente

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

## Correlation



Scatter



Heatmap



Correlogram



Bubble



Connected Scatter



Density 2D

## Rankings



Barplot



Spider / Radar



Wordcloud



Parallel



Lollipop / Stem



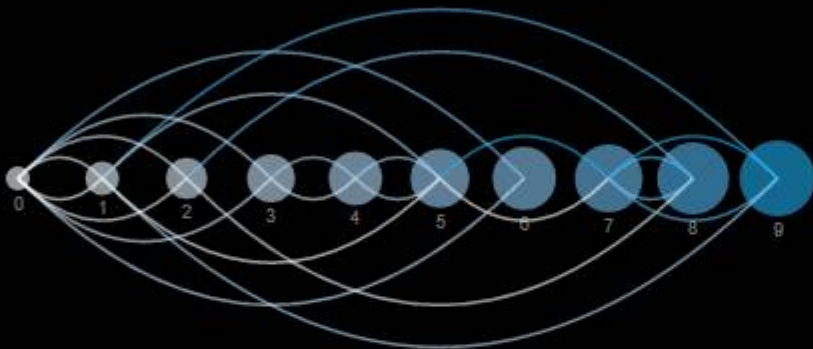
Circular Barplot



# Ordenação

<http://sorting.at/>

QUICK SORT  
10 randomly ordered elements

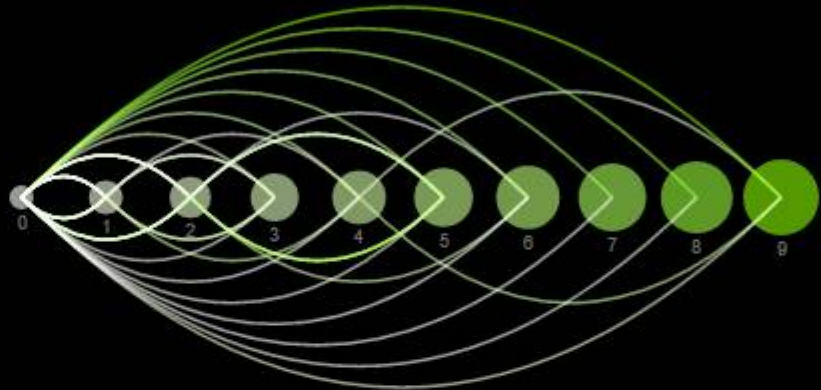


INVERSIONS

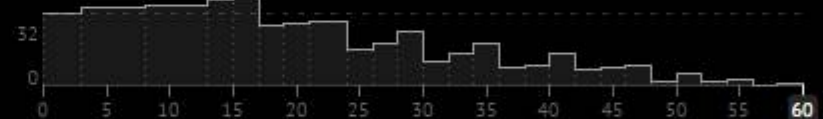
MAX 45



HEAPSORT  
10 randomly ordered elements

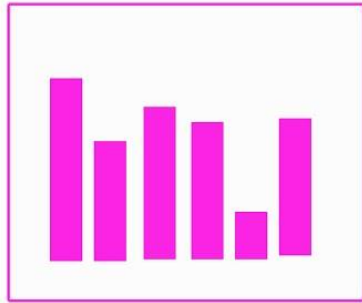


MAX 45

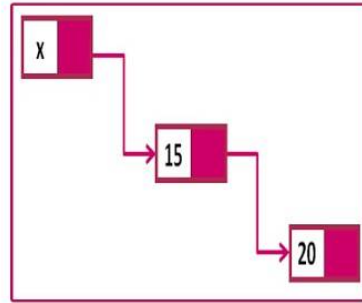




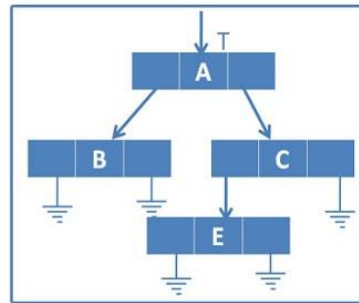
# Estrutura de Dados



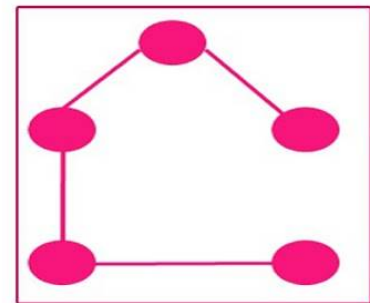
Sorting



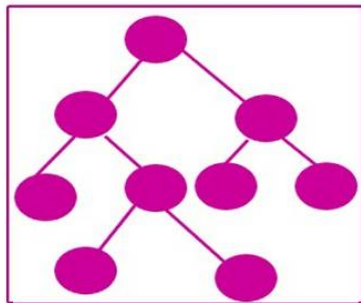
Link list



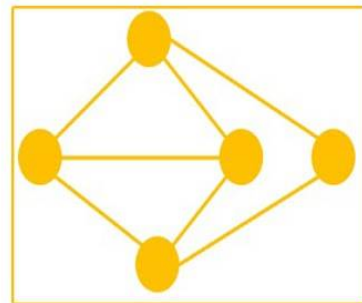
list



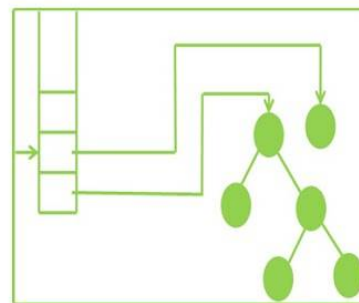
spanning tree



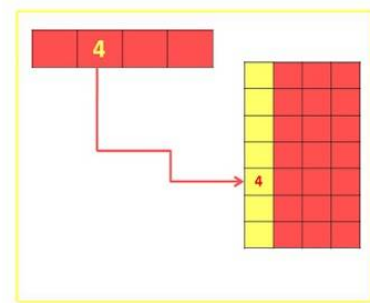
Tree



Graph



Stack



Hashing

By...navinkumardhoprephotography.com