

Ferramentas de Produtividade

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Apresentação Jupyter Notebook



Jupyter

O que é:

- Ferramenta para compilação de códigos;
- É possível rodar células de código separadas;
- Separação de códigos por trechos;
- Criação de anotações didáticas e explicativas com maior facilidade.

Jupyter - Online

An example: visualizing data in the notebook ✨

Below is an example of a code cell. We'll visualize some simple data using two popular packages in Python. We'll use [NumPy](#) to create some random data, and [Matplotlib](#) to visualize it.

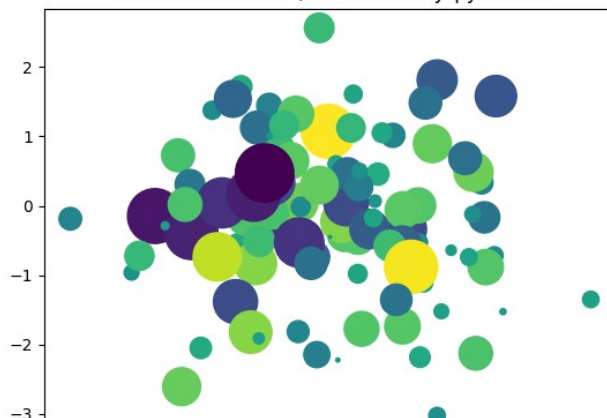
Note how the code and the results of running the code are bundled together.

```
[1]: a = 2  
a
```

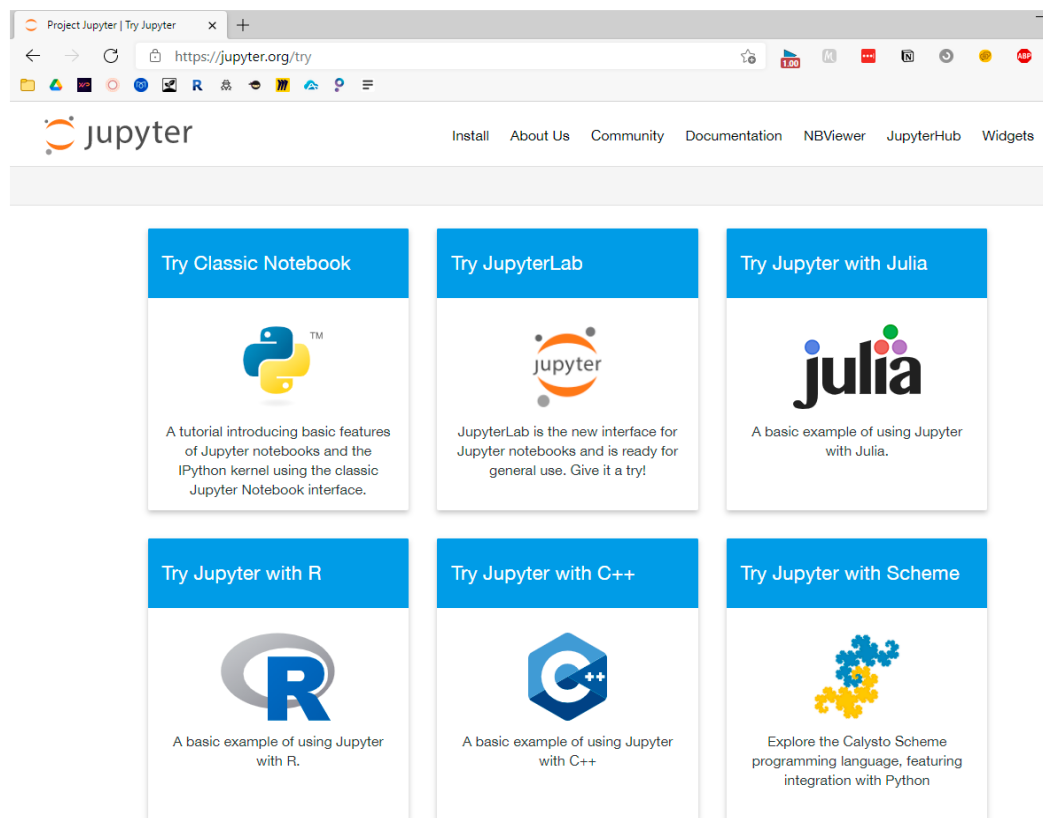
```
[1]: 2
```

```
[1]: from matplotlib import pyplot as plt  
import numpy as np  
  
# Generate 100 random data points along 3 dimensions  
x, y, scale = np.random.randn(3, 100)  
fig, ax = plt.subplots()  
  
# Map each onto a scatterplot we'll create with Matplotlib  
ax.scatter(x=x, y=y, c=scale, s=np.abs(scale)*500)  
ax.set(title="Some random data, created with JupyterLab!")  
plt.show()
```

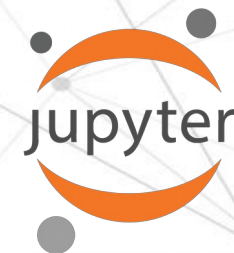
Some random data, created with JupyterLab!



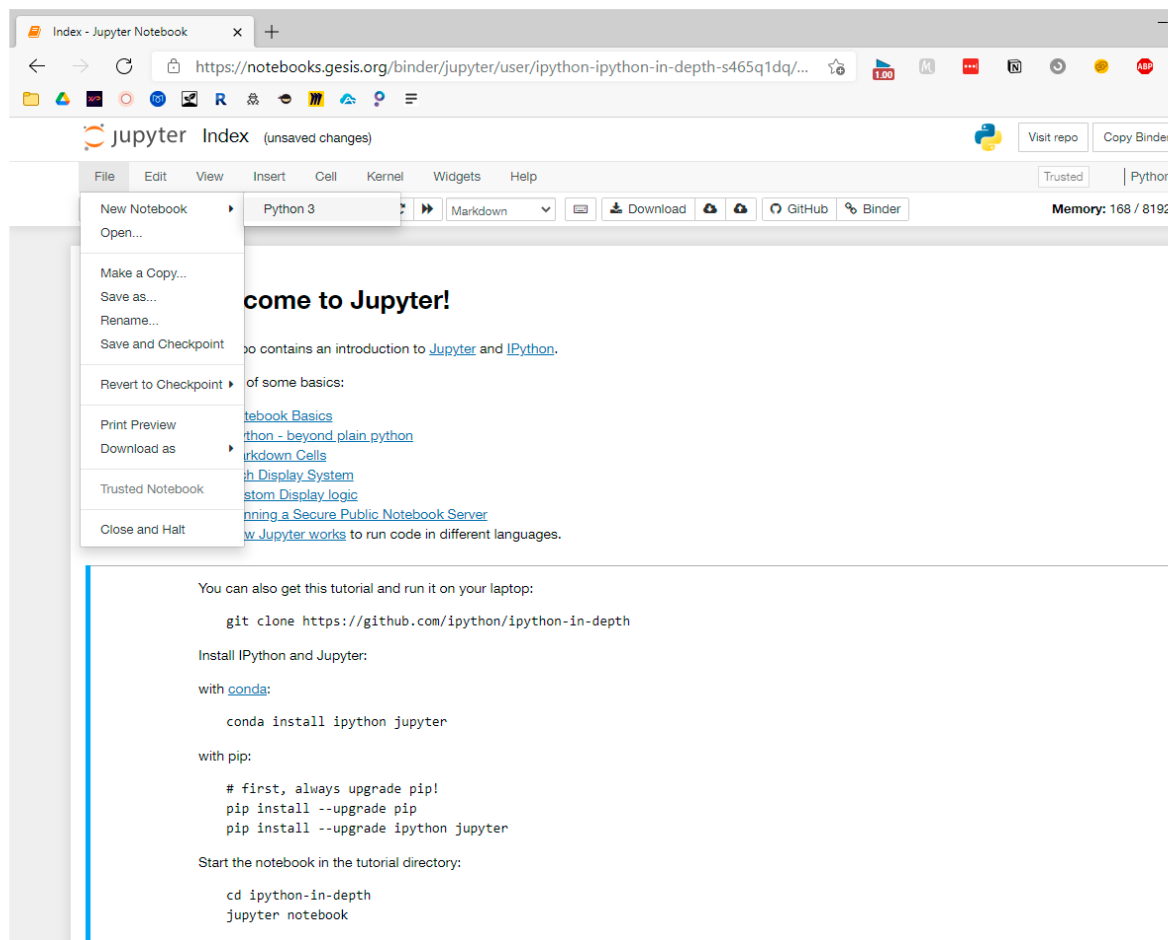
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[site jupyter](https://jupyter.org/try)



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Index - Jupyter Notebook

https://notebooks.gesis.org/binder/jupyter/user/ipython-ipython-in-depth-s465q1dq/...

jupyter Index (unsaved changes)

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Python 3 Markdown Download GitHub Binder Memory: 168 / 8192

New Notebook
Open...

Make a Copy...
Save as...
Rename...
Save and Checkpoint
Revert to Checkpoint
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Close and Halt

come to Jupyter!

to contains an introduction to [Jupyter](#) and [IPython](#).

of some basics:

- [tebook Basics](#)
- [thon - beyond plain python](#)
- [rkdown Cells](#)
- [h Display System](#)
- [stom Display logic](#)
- [nning a Secure Public Notebook Server](#)
- [w Jupyter works](#) to run code in different languages.

You can also get this tutorial and run it on your laptop:

```
git clone https://github.com/ipython/ipython-in-depth
```

Install IPython and Jupyter:

with [conda](#):

```
conda install ipython jupyter
```

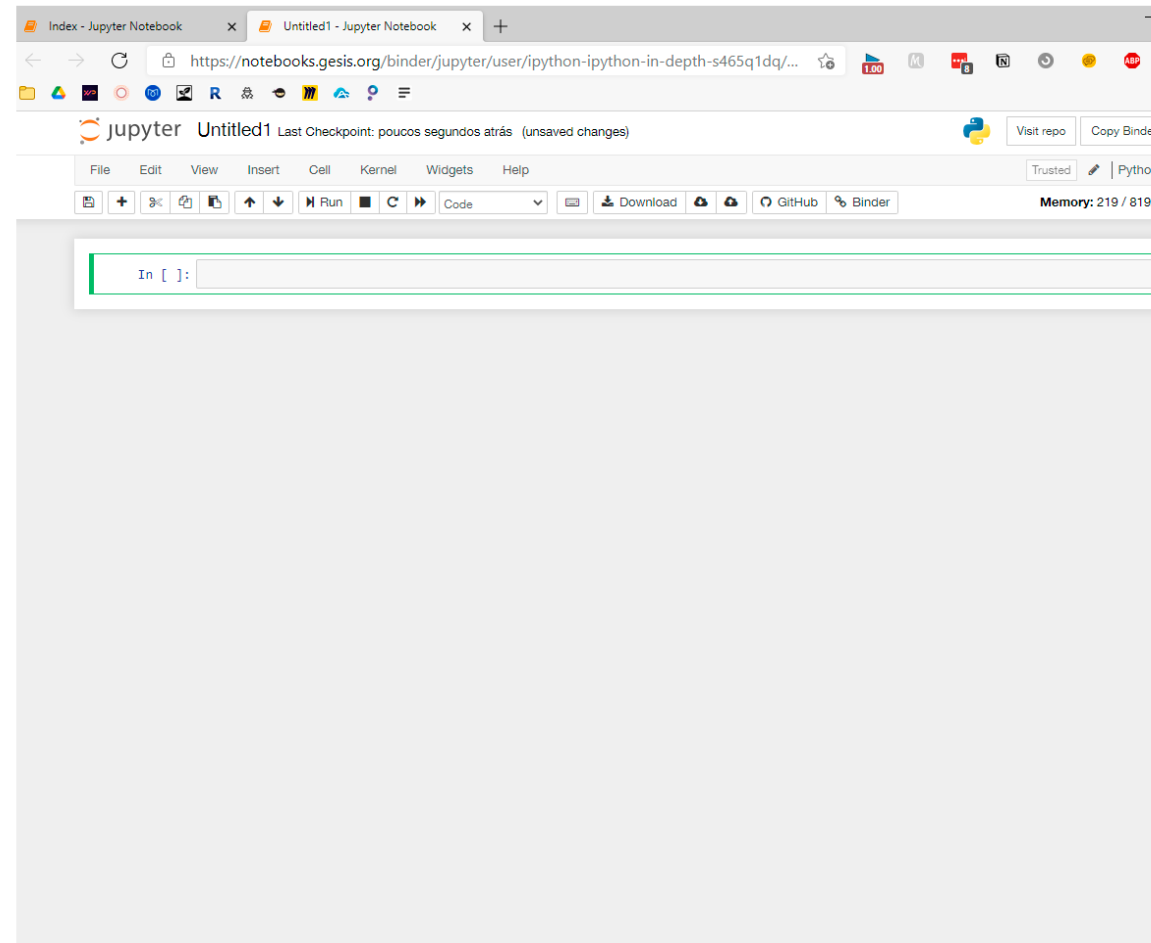
with pip:

```
# first, always upgrade pip!  
pip install --upgrade pip  
pip install --upgrade ipython jupyter
```

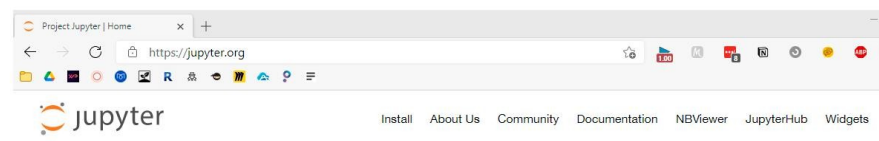
Start the notebook in the tutorial directory:

```
cd ipython-in-depth  
jupyter notebook
```

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Jupyter - Instalação



The Jupyter Notebook

The Jupyter Notebook is an open-source web application that allows to create and share documents that contain live code, equations, visualizations and narrative text. Uses include: data cleaning and transformation, numerical simulation, statistical modeling, data visualization, machine learning, and much more.

[Try it in your browser](#)

[Install the Notebook](#)



Language of choice

Jupyter supports over 40 programming languages, including Python, R, Julia, and Scala.



Share notebooks

Notebooks can be shared with others using email, Dropbox, GitHub and the [Jupyter Notebook Viewer](#).



Interactive output

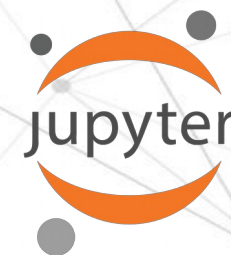
Your code can produce rich, interactive output: HTML, images, videos, LaTeX, and custom MIME types.



Big data integration

Leverage big data tools, such as Apache Spark, from Python, R, Scala. Explore that same data with pandas, scikit-learn, ggplot2, TensorFlow.

jupyter.org



Jupyter - Instalação

Windows | macOS | Linux

Anaconda 2019.10 for Windows Installer

Python 3.7 version

Download

64-Bit Graphical Installer (462 MB)
32-Bit Graphical Installer (410 MB)

Python 2.7 version

Download

64-Bit Graphical Installer (413 MB)
32-Bit Graphical Installer (356 MB)

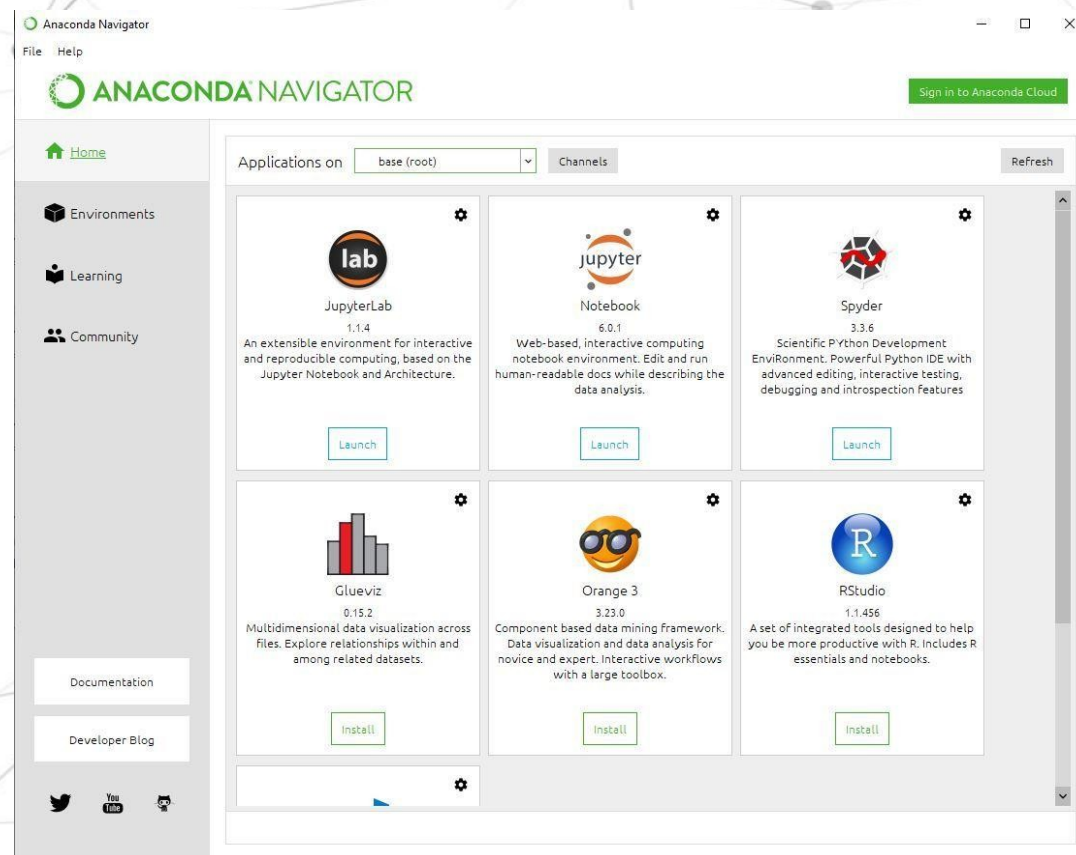
[site anaconda](https://www.anaconda.com)

Jupyter - Instalação

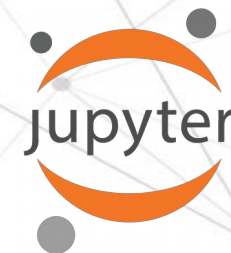


[site anaconda](https://anaconda.org/)

Jupyter - Instalação



[anaconda](#)
[Tutorial Anaconda](#)



Jupyter - Instalação

```
python -m pip install jupyter
```

[Tutorial Instalar Jupyter](#)

Tempo de Execução:
Máximo: 20 / 25min