



OPENCV INTRO INTRODUCCIÓN

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Background designed by kjpargeter / Freepik

- ▶ Descarga el software Anaconda desde <https://www.anaconda.com/distribution/>

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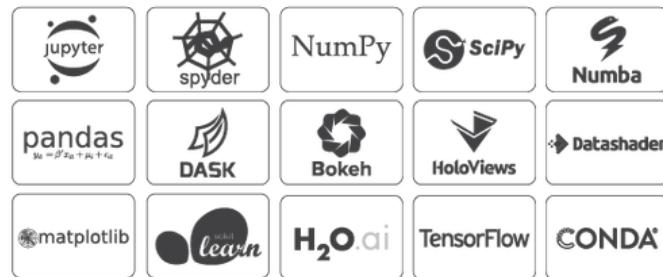
Anaconda Distribution

The World's Most Popular Python/R Data Science Platform

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The open-source **Anaconda Distribution** is the easiest way to perform Python/R data science and machine learning on Linux, Windows, and Mac OS X. With over 11 million users worldwide, it is the industry standard for developing, testing, and training on a single machine, enabling *individual data scientists* to:

- Quickly download 1,500+ Python/R data science packages
- Manage libraries, dependencies, and environments with **Conda**
- Develop and train machine learning and deep learning models with **scikit-learn**, **TensorFlow**, and **Theano**
- Analyze data with scalability and performance with **Dask**, **NumPy**, **pandas**, and **Numba**
- Visualize results with **Matplotlib**, **Bokeh**, **Datashader**, and **Holoviews**



The screenshot shows the Anaconda Navigator interface. On the left sidebar, there are links for Home, Environments, Learning, Community, Documentation, and Developer Blog. The main area displays a grid of applications. The first application in the top row is Spyder, which is highlighted with a red dashed border and a blue arrow pointing to it from a yellow callout box. The Spyder card includes its icon, version 3.3.2, a brief description of being a Python IDE with advanced features, and a 'Launch' button. The other two applications in the top row are Glueviz and Orange 3. Glueviz is described as multidimensional data visualization software, and Orange 3 is a component-based data mining framework. Both have 'Install' buttons. In the bottom row, the RStudio application is shown, featuring its icon, version 1.1.456, a description of being a productivity tool for R, and a 'Launch' button. A yellow callout box contains the text: "De los programas que vienen con Anaconda, usaremos Spyder para programar".

Anaconda Navigator

Sign in to Anaconda Cloud

Home

Environments

Learning

Community

Documentation

Developer Blog

Spyder

Glueviz

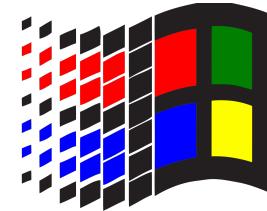
Orange 3

RStudio

De los programas que vienen con Anaconda, usaremos Spyder para programar

- Abrir Anaconda Prompt en **Windows** y luego escribir

```
conda install opencv presione tecla enter
```



Anaconda Prompt - conda install opencv

```
(base) C:\Users\HF>conda install opencv
Solving environment: -
```

RECOMENDACIÓN

Toma mucho tiempo la instalación de los paquetes de opencv. Realice esto con anticipación

Instalación desde Anaconda

- Abrir una terminal y luego escribir

```
pip install opencv-python
```

presione tecla enter

```
pip3 install opencv-python
```

presione tecla enter



```
mlacarrasco — bash — 79x23

(base) mbp-de-miguel:~ mlacarrasco$ pip install opencv-python
Collecting opencv-python
  Downloading https://files.pythonhosted.org/packages/bf/d8/2422f90a596fc90d302
7415121221f7cfb2513af8fd2a66203864941fabf/opencv_python-4.1.2.30-cp37-cp37m-mac
osx_10_9_x86_64.whl (45.2MB)
|██████████| 45.2MB 1.4MB/s
Requirement already satisfied: numpy>=1.14.5 in /opt/anaconda3/lib/python3.7/si
te-packages (from opencv-python) (1.17.2)
Installing collected packages: opencv-python
Successfully installed opencv-python-4.1.2.30
(base) mbp-de-miguel:~ mlacarrasco$ pip3 install opencv-python
Collecting opencv-python
  Using cached https://files.pythonhosted.org/packages/bf/d8/2422f90a596fc90d30
27415121221f7cfb2513af8fd2a66203864941fabf/opencv_python-4.1.2.30-cp37-cp37m-ma
cosx_10_9_x86_64.whl
Requirement already satisfied: numpy>=1.14.5 in /Library/Frameworks/Python.fram
ework/Versions/3.7/lib/python3.7/site-packages (from opencv-python) (1.17.0)
Installing collected packages: opencv-python
Successfully installed opencv-python-4.1.2.30
You are using pip version 19.0.3, however version 19.3.1 is available.
You should consider upgrading via the 'pip install --upgrade pip' command.
(base) mbp-de-miguel:~ mlacarrasco$ pip install opencv-python
```

RECOMENDACIÓN

Toma mucho tiempo la instalación de los paquetes de opencv. Realice esto con anticipación

Synder 3

Ambiente de trabajo

- Abrir el editor Spyder 3 (que viene de la instalación de Anaconda), una vez que esté instalado openCV

The screenshot shows the Spyder 3 IDE interface. On the left is the code editor with a Python script named 'temp.py' containing code related to OpenCV. The terminal window at the bottom shows the Python and IPython startup messages. A help panel is open in the center-right area.

```
1 # -*- coding: utf-8 -*-
2 """
3 Editor de Spyder
4
5 Este es un archivo temporal.
6 """
7 import cv2
8 img = cv2.imread('b.png',0)
9 cv2.imshow('image', img)
10
11 cv2.waitKey(0)
12 cv2.destroyAllWindows()
13
14 |
15
16
17
```

Permisos: RW | Fin de línea: CRLF | Codificación: UTF-8 | Línea: 14 | Columna: 1 | Memoria: 76 %

