

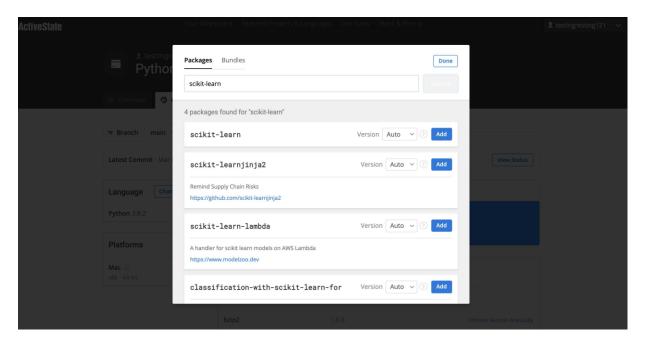
How to Install Scikit-Learn?

Scikit-learn is an open source machine learning library for Python. You have a number of options when it comes to installing scikit-learn, depending on your needs:

- If you **don't have Python installed**, you can install scikit-learn as part of a Python distribution, such as <u>ActivePython</u>.
- If you already have Python and prefer to **install pre-built binaries**, you can install scikit-learn by simply running the following command:

pip install scikit-learn

• Pre-built binaries may contain malicious code, especially if you mistakenly install a typo-squatted version. Instead, consider **installing Python libraries from source code**. The simplest way to build scikit-learn from source is to use the ActiveState Platform to automatically build and package it for Windows, Mac or Linux.



Scikit-Learn Step by Step Installation

For most users, the best approach is to install the binary version of scikit-learn using an official release from pypi.org, the Python Package Index. You can do so with the following steps:

1. Scikit-learn requires Python 3.6+. To check which version of Python you have installed, run the following command:

python3 --version

The output should be similar to:

Pvthon 3.8.2

2. If you have a valid Python version you can run the following command to download and install a pre-built binary of scikit-learn:

pip install scikit-learn

The following dependencies will be automatically installed along with scikit-learn:

- NumPy 1.13.3+
- SciPy 0.19.1+
- Joblib 0.11+
- threadpoolctl 2.0.0+

Alternatively, if you already have scikit-learn and/or any of its dependencies are already installed, they can be updated as part of the installation by running the following command:

pip install -U scikit-learn

You can verify your Scikit-learn installation with the following command:

python -m pip show scikit-learn

The output should be similar to:

```
C:\>python3 -m pip show scikit-learn
Name: scikit-learn
Version: 0.24.0
Summary: A set of python modules for machine learning and data mining
Home-page: http://scikit-learn.org
Author: None
Author-email: None
License: new BSD
Location: c:\python38\lib\site-packages
Requires: numpy, scipy, threadpoolctl, joblib
Required-by:
```

If you want to create plots and charts based on the data you use in scikit-learn, you may also want to consider installing matplotlib. For information about matplotlib and how to install it, refer to 'What is Matplotlib in Python'?

How to Import Scikit-Learn in Python

Once scikit-learn is installed, you can start working with it. A scikit-learn script begins by importing the scikit-learn library:

import sklearn

It's not necessary to import all of the scitkit-learn library functions. Instead, import just the function(s) you need for your project. For example, to import the linear regression model, enter:

from sklearn import linear_model

Or try:

from sklearn.linear model import LinearRegression