

Installing Python (Miniforge)

(status Jan. 2025)

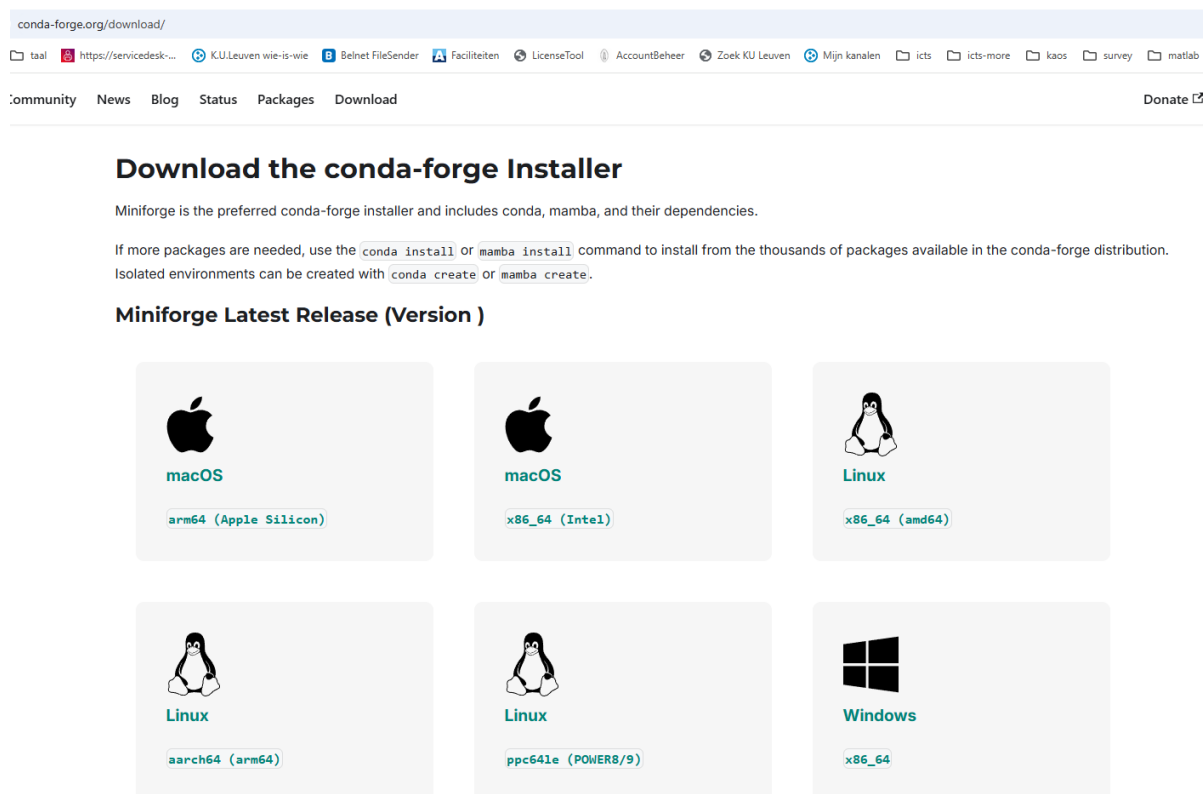
Proposed installer: Conda-forge (miniforge): <https://conda-forge.org/download/>

Contents

Download the software	2
macOS	2
Windows	3
Creating a New Conda Environment.....	4

Download the software

1. Go to miniforge install page: <https://conda-forge.org/download/>
2. Click the link for your operating system.
Miniforge3-MacOSX-arm64.sh (macOS) or
Miniforge3-Windows-x86_64.exe (Windows).



macOS

1. Open **Terminal** and navigate to your Downloads folder:
`cd ~/Downloads`
2. Make the installer executable (if the file name is different - use that file name!):
`chmod +x Miniforge3-MacOSX-arm64.sh`
3. Run the installer:
`./Miniforge3-MacOSX-arm64.sh`
4. Follow the prompts to complete the installation. Agree to the license terms and choose the installation location (default is usually fine).
5. When asked Do you wish to update your shell profile to automatically initialize conda?
type Yes

Once the installer has completed, close and reopen your terminal, test that the install has worked:
`conda list`

This will display a list of all the packages and their versions installed in your current conda environment.

Windows

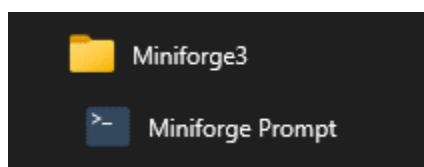
Run the .exe file that was downloaded (Miniforge3-Windows-x86_64.exe).

1. When asked whether to install it for just the current user or all users, select “Just for me (recommended).”
2. When asked where to install `miniforge3`, the default (in your user folder) is fine.
3. You’ll be faced with some check boxes.

Check

1. to Add Miniforge 3 to my PATH environment variable (even if it says it isn’t recommended)
2. to Register Miniforge3 as my default Python 3.12.
3. the box for removing the cache.

Once the installation finished, look for the Miniforge prompt under the installed programs,



Launch the prompt to have your base environment running, test that the install has worked:
`conda list`

This will display a list of all the packages and their versions installed in your current conda environment.

Creating a New Conda Environment

Strong recommendation: Never install any packages into the base environment!

It is highly recommended to avoid installing any packages in the base environment. This is because package incompatibilities can arise. If such issues occur in any environment other than the base, you can simply delete and recreate the environment. However, if this happens in the base environment, you would need to delete and reinstall Miniforge.

Before installing additional modules , create a new Conda environment.

1. Open your terminal (Miniforge Prompt in the case of Windows).
2. Type the following command to create a new environment named “myenv” :

```
conda create --name myenv
```

This command creates a new environment named “myenv”

3. Activate the new environment by typing the following command:

```
conda activate myenv
```

Basic modules to install:

- spyder
- jupyterlab
- notebook
- numpy
- scipy
- pandas
- scikit-learn
- scipy
- matplotlib
- seaborn
- sympy

The modules can be installed one by one, or can be installed in 1 command.

```
conda install -c conda-forge jupyterlab
```

Or can be installed in 1 command (list all the modules in the install command)

```
conda install -c conda-forge spyder numpy scipy pandas matplotlib  
sympy jupyterlab notebook seaborn scikit-learn
```

Miniforge should by default use the conda-forge channel, by specifying the -c option, you can explicitly force to use a specified channel

4. Deactivate the environment with the following command:

```
conda deactivate
```

Sources:

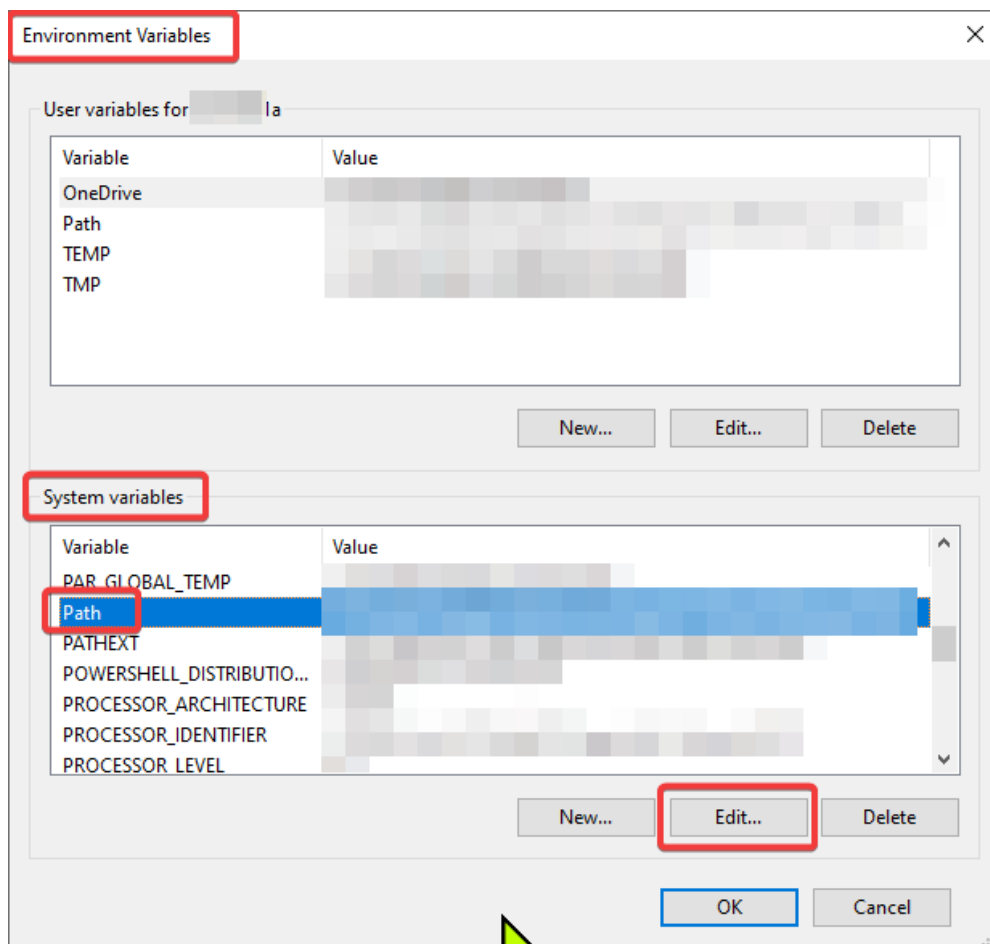
https://www.practicaldatascience.org/notebooks/PDS_not_yet_in_coursera/00_setup_env/setup_python.html

<https://kirenz.github.io/codelabs/codelabs/miniforge-setup/#0>

Note

On Windows, Miniforge is not added to the system path by default. It is recommended to use the Miniforge Prompt, available from the Start menu. If desired, the Miniforge installation path may be added to the path environment variable manually after installation so the software may be used more conveniently from any command prompt with limited chance of software conflicts.

Edit the **Path** variable under **System variables** and add the miniforge3 installation path to it.



Check <https://www.computerhope.com/issues/ch000549.htm> To add a path to the PATH environment variable