

How to install PyTorch

With the recent launch of PyTorch support for Windows, the library is supported for Mac, Linux and now Windows. It can be installed by following the directions at the following with conda or pip: <https://pytorch.org/>

If you do not have a Nvidia driver it's highly advised to use CPU versions only so that it installs correctly. If you install the GPU version without the necessary driver you will most likely see a DLL load error and it can be resolved by installing the CPU version. In addition, PyTorch recently has moved to v0.4.0. The new version has caused a bug in the Doom related code and it will show as follows when using the newer version of PyTorch:

```
TypeError: multinomial() missing 1 required positional arguments: "num_samples"
```

This can be resolved by using the following solution or downgrading to a PyTorch version that is < 0.4.0:

<https://www.udemy.com/artificial-intelligence-az/learn/v4/questions/4319834>

To install previous versions of PyTorch you can use the directions here for both conda, pip and building from source: <https://pytorch.org/previous-versions/>

How to install Kivy

It's advisable to install Kivy with the development version for each OS. The development version can be found within the installation instructions, for example: <https://kivy.org/docs/installation/installation-osx.html>.

Using Homebrew with pip¶

You can install Kivy with Homebrew and pip using the following steps:

1. Install the requirements using [homebrew](#):

```
$ brew install pkg-config sdl2 sdl2_image sdl2_ttf sdl2_mixer gstreamer
```

2. Install Cython and Kivy using pip:

```
$ pip install Cython==0.26.1
```

- To install the development version, use this in the second step:

```
$ pip install https://github.com/kivy/kivy/archive/master.zip
```

The development version can be found for each OS. Remember to first install the dependencies.

Windows:

- <https://kivy.org/docs/installation/installation-windows.html#nightly-wheel-installation>

Linux:

- <https://kivy.org/docs/installation/installation-linux.html#installation>

If you have any trouble with the installation you can also see the modified setups provided by students in the course that have been successful installing the packages:

Modified Setups with installation instructions:

Mac

- <https://www.udemy.com/artificial-intelligence-az/learn/v4/questions/4084834>

Ubuntu

- <https://www.udemy.com/artificial-intelligence-az/learn/v4/questions/3862592>

Windows

Install Gym and Doom

Due to changes with Gym the recommended version to use is v0.7.4. You can install the specific version with:

```
pip install gym==0.7.4
```

In addition it is highly recommended to use a VM if you are on Windows and to install with Ubuntu.

Install the dependencies first:

OSX:

```
brew install cmake boost boost-python sdl2 swig wget
```

Ubuntu:

```
apt-get install -y python-numpy python-dev cmake zlib1g-dev libjpeg-dev xvfb libav-tools xorg-dev  
python-opengl libboost-all-dev libsdl2-dev swig
```

<https://github.com/openai/gym#installing-everything>

For those not running Python 2.7 gym states that:

We currently support Linux and OS X running Python 2.7 or 3.5. Some users on OSX + Python3 may need to run

```
brew install boost-python --with-python3
```

Install Gym:

```
pip install gym==0.7.4
```

Install Doom:

```
pip install ppaquette-gym-doom
```

If you run into the non-zero exit installation bug you can try the following modified setups:

Ubuntu

- <https://www.udemy.com/artificial-intelligence-az/learn/v4/questions/2695950>

Mac

- <https://www.udemy.com/artificial-intelligence-az/learn/v4/questions/4088774>