

This is a step-by-step introduction to getting Tensorflow 2 working with PyCharm. As with anything Python, there are many different ways of achieving the same thing each with different pros and cons.

### 1. System requirements:

#### System requirements

1. Python 3.5–3.8. ...
2. pip 19.0 or later (requires manylinux2010 support)
3. Ubuntu 16.04 or later (64-bit)
4. macOS 10.12.6 (Sierra) or later (64-bit) (no GPU support)
5. Windows 7 or later (64-bit) ...
6. Raspbian 9.0 or later.
7. GPU support requires a CUDA®-enabled card (Ubuntu and Windows)

29 juli 2020 Tell me what you want to do

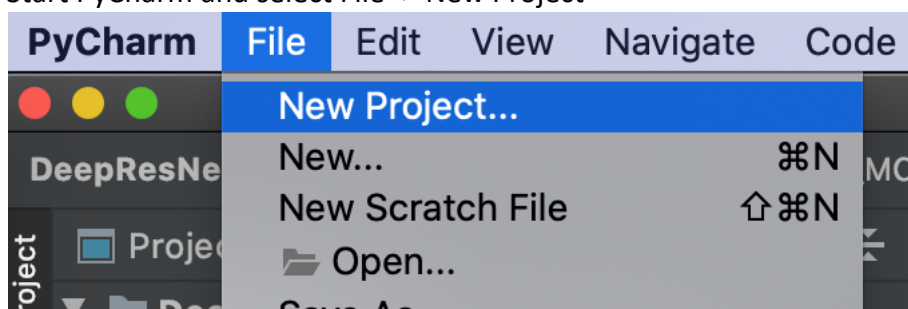
www.tensorflow.org › install › pip

#### Install TensorFlow with pip

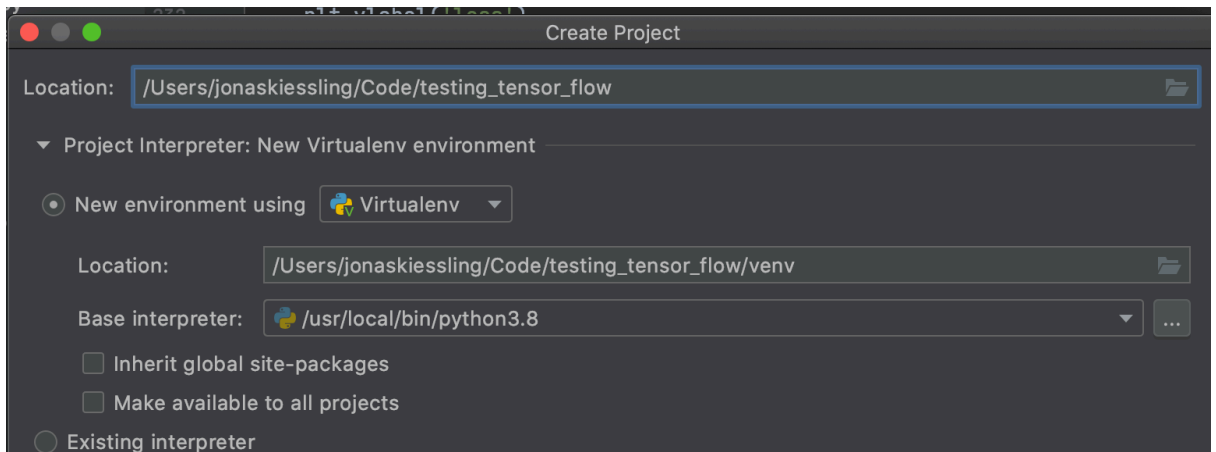
2. Download python 3.8: <https://www.python.org/downloads/>
3. Check if you have pip, and which version you have installed (you need >= 19.0) :
  - a. `python -m pip --version`
  - b. If you do not have it installed, you need to install it. Google “install pip”
  - c. If your version is too old, you need to upgrade. Google “upgrade pip”.
4. Install PyCharm. You might have a license through KTH, but the community version is available for free and has all the features you will need:  
<https://www.jetbrains.com/pycharm/download/>

Creating a new project, setting up virtual environment and installing tensorflow (precise layout might vary between versions of PyCharm and by operating system):

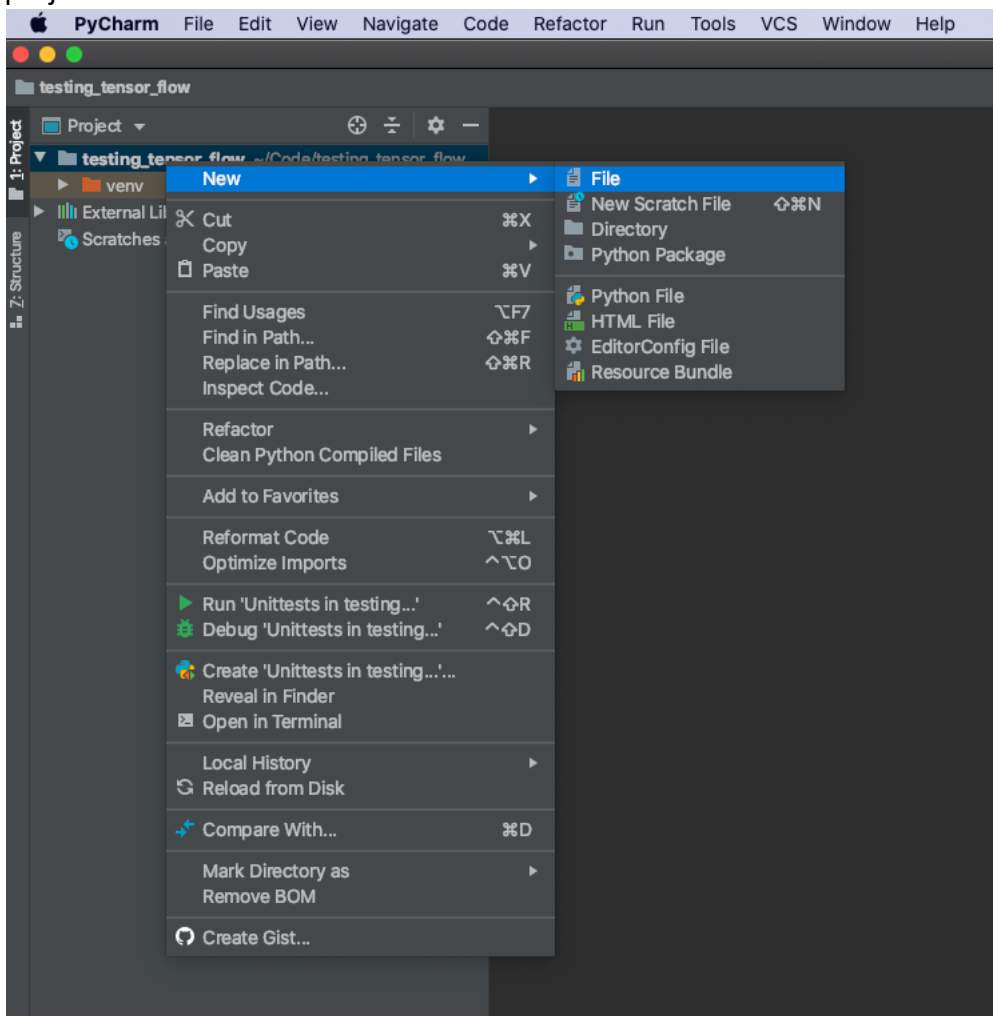
1. Start PyCharm and select File -> New Project



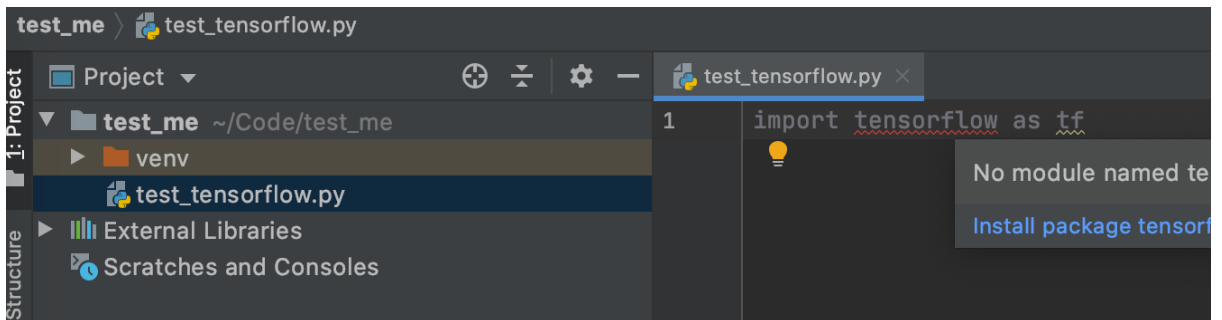
2. Select location and a name of the project (final folder determines the name of the project). For “Project interpreter” select “New Virtual Environment”. Make sure the base interpreter is pointing to a Python 3.8



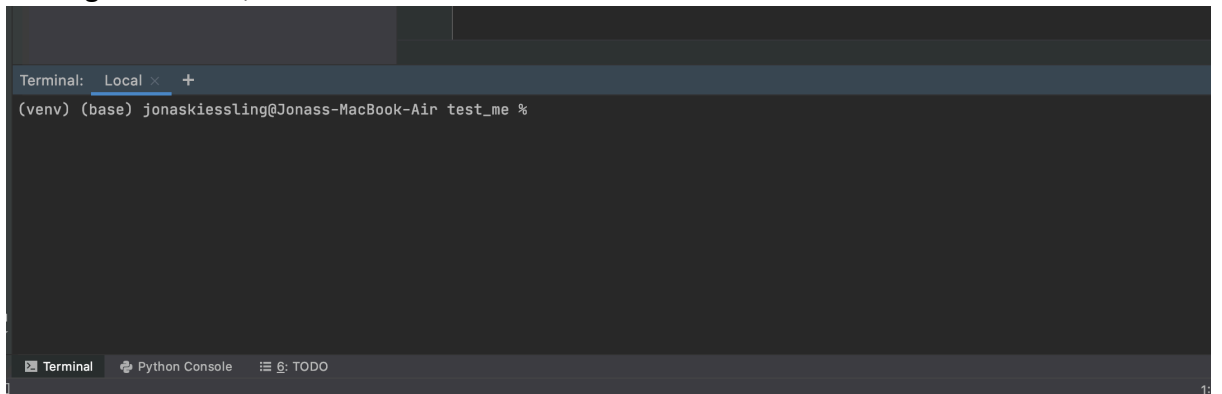
3. Select to open project in a new window. Det kan ta lite tid innan ett nytt projekt är igång.
4. Time to create a first source file. In the navigation bar, right click on the root of the project and select New -> File:



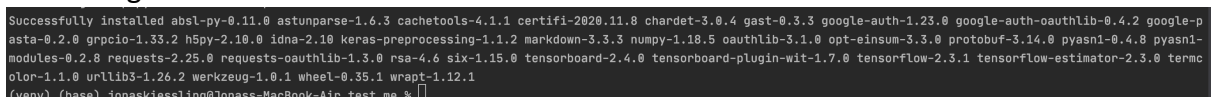
- 5.
6. Call the file test\_tensor.py where we will implement some simple tensorflow code. Start with the line "import tensorflow as tf"



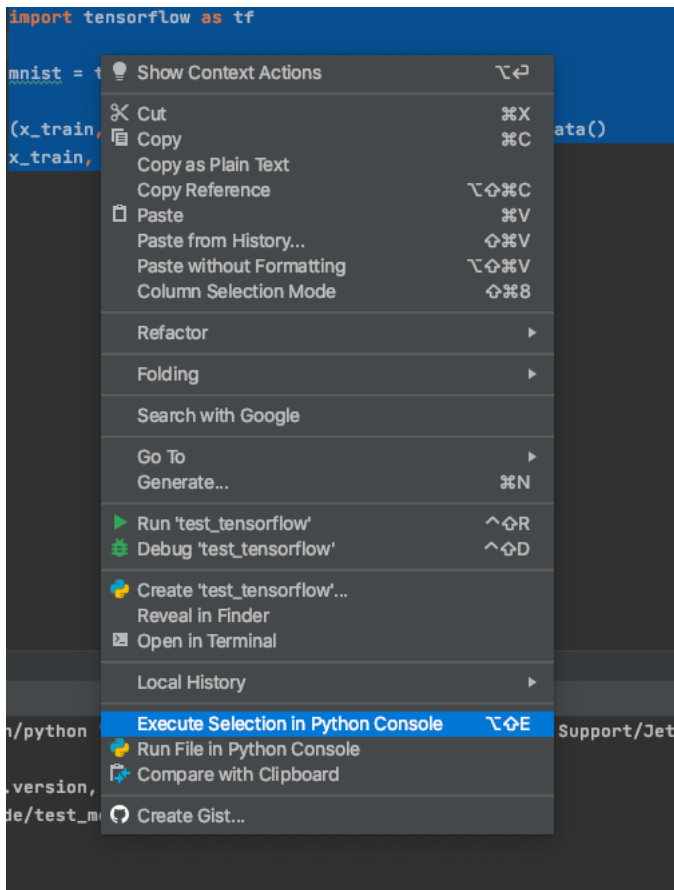
7. Now it is time to install tensorflow! Open a terminal in PyCharm, do this either by clicking “terminal”, or View -> Tool Window -> terminal



- 8.
9. Note that it says (venv) at the start of the command prompt. That means your virtual environment is sourced, so that anything you install will exist only inside this environment (unlike if you just open a terminal outside pycharm and installed tensorflow). Now type: `pip install tensorflow` . If installation worked, you should see something like



10. Back in our source file “test\_tensorflow.py”, the red error line should have disappeared. Copy and paste the code from <https://www.tensorflow.org/tutorials/quickstart/beginner>
11. To run code, select the code you wish to execute and select “Execute selection in python console”, either through right click with mouse, or alt-shift-e



12. This should execute the selected code in the python console.
13. Try running the full example from the tutorial!