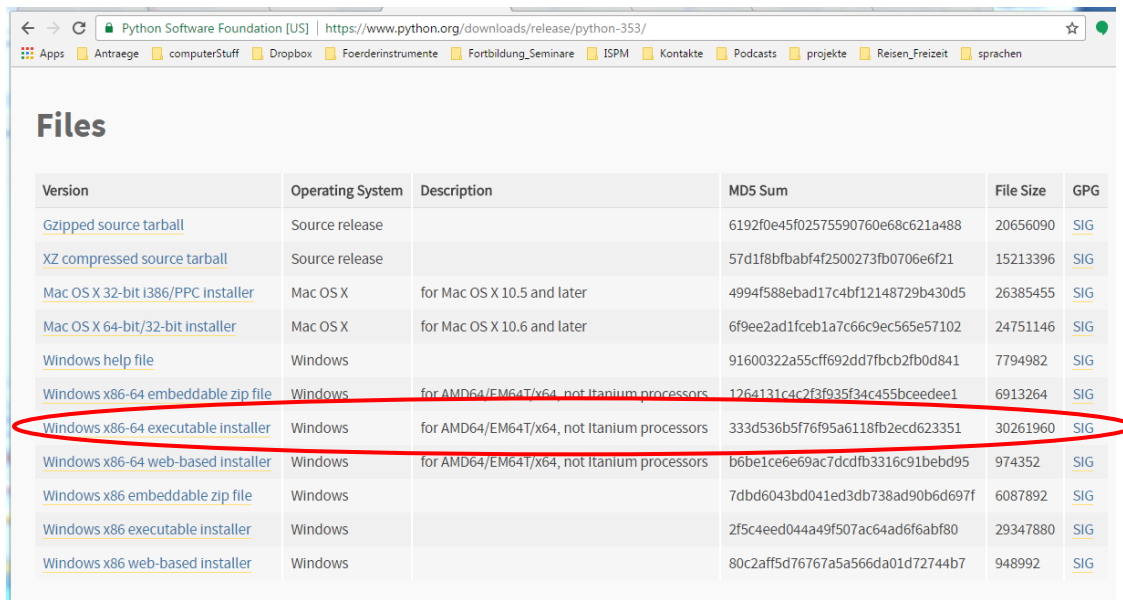


Installation guide for tensorflow 1.0 , Python 3.5 & jupyter notebook on Windows (7)

a) Install Python 3.5

Download python 3.5 from official Python page by using "executable installer":

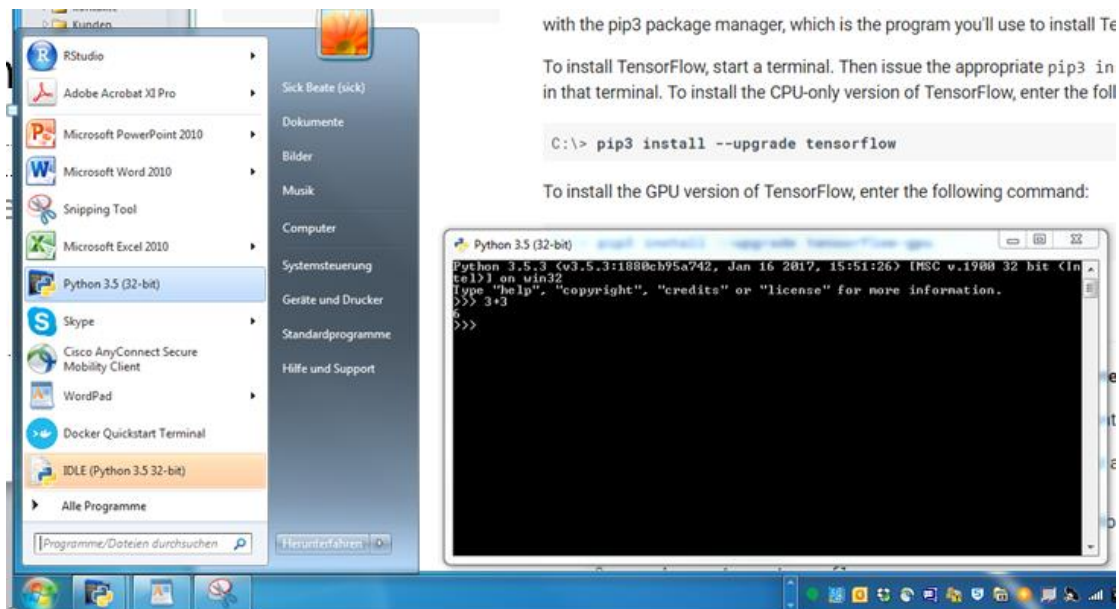
<https://www.python.org/downloads/release/python-353/>



| Version | Operating System | Description | MD5 Sum | File Size | GPG |
|---|------------------|---|----------------------------------|-----------|---------------------|
| Gzipped source tarball | Source release | | 6192f0e45f02575590760e68c621a488 | 20656090 | SIG |
| XZ compressed source tarball | Source release | | 57d1f8bfbabf4f2500273fb0706e6f21 | 15213396 | SIG |
| Mac OS X 32-bit i386/PPC installer | Mac OS X | for Mac OS X 10.5 and later | 4994f588ebad17c4bf12148729b430d5 | 26385455 | SIG |
| Mac OS X 64-bit/32-bit installer | Mac OS X | for Mac OS X 10.6 and later | 6f9ee2ad1fceb1a7c66c9ec565e57102 | 24751146 | SIG |
| Windows help file | Windows | | 91600322a55cff692dd7fbc2fb0d841 | 7794982 | SIG |
| Windows x86-64 embeddable zip file | Windows | for AMD64/EM64T/x64, not Itanium processors | 1264131c4c2f3f935f34c455bceede1 | 6913264 | SIG |
| Windows x86-64 executable installer | Windows | for AMD64/EM64T/x64, not Itanium processors | 333d536b5f76f95a6118fb2ecd623351 | 30261960 | SIG |
| Windows x86-64 web-based installer | Windows | for AMD64/EM64T/x64, not Itanium processors | b6be1ce6e69ac7dcdfb3316c91bebd95 | 974352 | SIG |
| Windows x86 embeddable zip file | Windows | | 7dbd6043bd041ed3db738ad90b6d697f | 6087892 | SIG |
| Windows x86 executable installer | Windows | | 2f5c4eed044a49f507ac64ad6f6abf80 | 29347880 | SIG |
| Windows x86 web-based installer | Windows | | 80c2aff5d76767a5a566da01d72744b7 | 948992 | SIG |

Execute the downloaded python3.5 installer: python-3.5.3.exe

Verify that python3.5 is installed correctly and close it again



with the pip3 package manager, which is the program you'll use to install TensorFlow.

To install TensorFlow, start a terminal. Then issue the appropriate pip3 in that terminal. To install the CPU-only version of TensorFlow, enter the following command:

```
C:\> pip3 install --upgrade tensorflow
```

To install the GPU version of TensorFlow, enter the following command:

```
Python 3.5 (32-bit)
Python 3.5.3 (v3.5.3:1880cb95a742, Jan 16 2017, 15:51:26) [MSC v.1900 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> 3+3
6
>>>
```

```
Python 3.5 (32-bit)
Python 3.5.3 (v3.5.3:1880cb95a742, Jan 16 2017, 15:51:26) [MSC v.1900 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> 3+3
6
>>> import sys
>>> print(sys.executable)
C:\Users\sick\AppData\Local\Programs\Python\Python35-32\python.exe
>>>
```

To add more paths type the commands in the python-widows:

```
import sys
sys.path.append("/home/me/mypy")
```

Or:

```
sys.path.insert(0, MORE_PATH)
```

```
sys.path.insert(0, 'C:\\Users\\sick\\AppData\\Local\\Programs\\Python\\Python35\\lib\\site-packages')
```

Close the python terminal.

b) Install Tensorflow and jupyter notebook

Follow the installation guide for tensorflow on Windows (for helpful details see below in this document):

https://www.tensorflow.org/install/install_windows

Installing with native pip



If the following version of Python is not installed on your machine, install it now:

- [Python 3.5.x from python.org](#)

TensorFlow only supports version 3.5.x of Python on Windows. Note that Python 3.5.x comes with the pip3 package manager, which is the program you'll use to install TensorFlow.

To install TensorFlow, start a terminal. Then issue the appropriate `pip3 install` command in that terminal. To install the CPU-only version of TensorFlow, enter the following command:

```
C:\> pip3 install --upgrade tensorflow
```

To be able to run the pip3 command we need to open a cmd-Terminal of Windows (Windows Start Button – type cmd) and change to the directory where python3 Scripts is located (to find the location of python scripts see above python session screenshot in section a) install python 3.5. Also in a german Windows with german names of directories in the file browser these path appear to be in English and should be verified in a python session as shown above).

```
cd C:\Users\Sick\AppData\Local\Programs\Python\Python35\Scripts
```

now you can install tensorflow with the following command:

```
pip3 install --upgrade tensorflow
```

```
C:\Users\sick\AppData\Local\Programs\Python\Python35\Scripts>pip3 install --upgrade tensorflow
```

(also other python modules can be installed by using the pip3 command in the cmd-terminal)

```
C:\Users\sick\AppData\Local\Programs\Python\Python35\Scripts>pip3 install --upgrade matplotlib
```

```
C:\Users\sick\AppData\Local\Programs\Python\Python35\Scripts>
C:\Users\sick\AppData\Local\Programs\Python\Python35\Scripts>pip3 install --upgrade tensorflow
Requirement already up-to-date: tensorflow in c:\users\sick\appdata\local\programs\python\python35\lib\site-packages (from tensorflow)
Requirement already up-to-date: wheel>=0.26 in c:\users\sick\appdata\local\programs\python\python35\lib\site-packages (from tensorflow)
Requirement already up-to-date: protobuf>=3.1.0 in c:\users\sick\appdata\local\programs\python\python35\lib\site-packages (from tensorflow)
Requirement already up-to-date: numpy>=1.11.0 in c:\users\sick\appdata\local\programs\python\python35\lib\site-packages (from tensorflow)
Requirement already up-to-date: six>=1.10.0 in c:\users\sick\appdata\local\programs\python\python35\lib\site-packages (from tensorflow)
Requirement already up-to-date: setuptools in c:\users\sick\appdata\local\programs\python\python35\lib\site-packages (from tensorflow)
Requirement already up-to-date: appdirs>=1.4.0 in c:\users\sick\appdata\local\programs\python\python35\lib\site-packages (from tensorflow)
Requirement already up-to-date: packaging>=16.8 in c:\users\sick\appdata\local\programs\python\python35\lib\site-packages (from tensorflow)
Requirement already up-to-date: pyparsing in c:\users\sick\appdata\local\programs\python\python35\lib\site-packages (from tensorflow)
C:\Users\sick\AppData\Local\Programs\Python\Python35\Scripts>
```

now we need to install jupyter notebook and some extensions with the following commands:

```
pip3 install jupyter
pip3 install ipywidgets
jupyter nbextension enable --py widgetsnbextension
```

```
C:\Users\sick\AppData\Local\Programs\Python\Python35\Scripts>
C:\Users\sick\AppData\Local\Programs\Python\Python35\Scripts>pip3 install jupyter
```

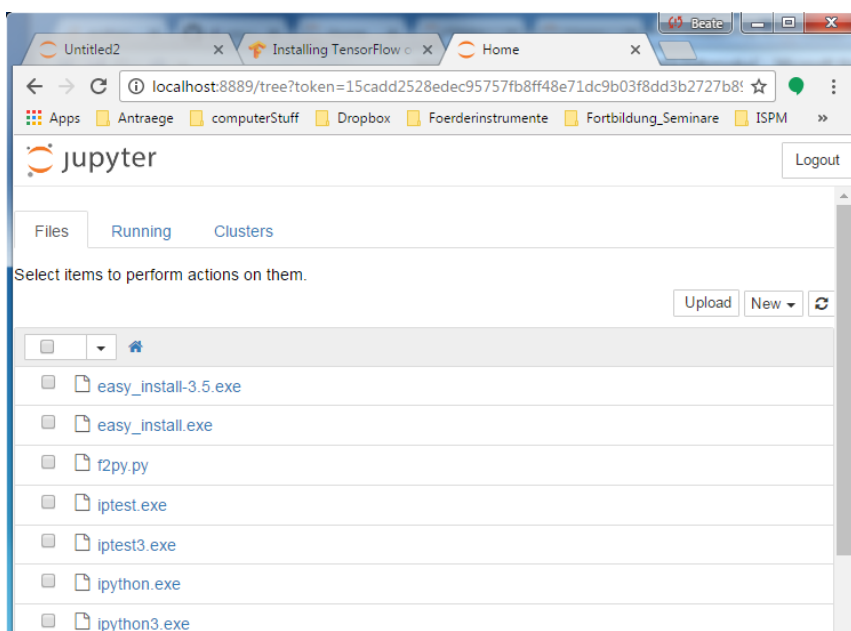
After the jupyter installation, you can run a notebook by typing the following command in the cmd window:

```
jupyter notebook
```

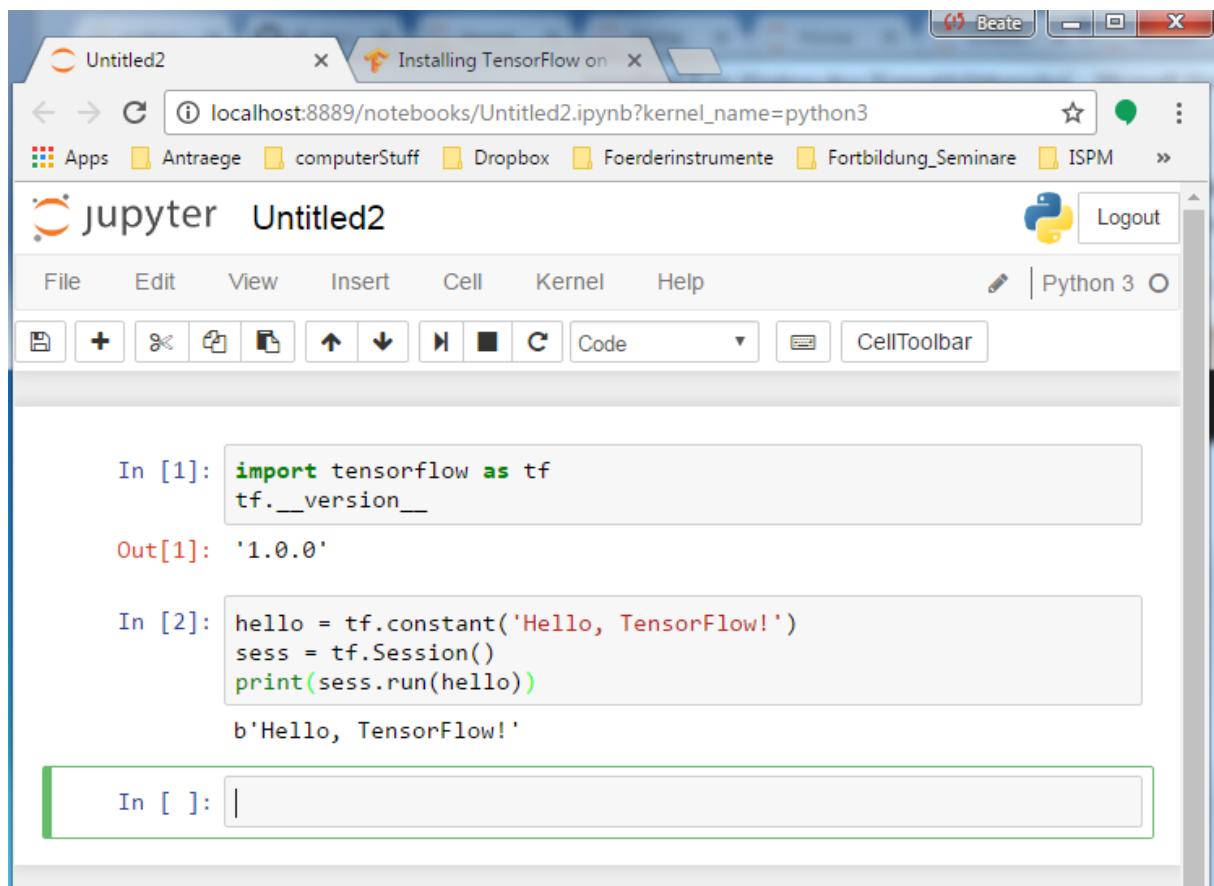
```
C:\Users\sick\AppData\Local\Programs\Python\Python35\Scripts>jupyter notebook
[I 16:36:58.170 NotebookApp] The port 8888 is already in use, trying another port.
[I 16:36:58.274 NotebookApp] Serving notebooks from local directory: C:\Users\sick\AppData\Local\
[I 16:36:58.274 NotebookApp] 0 active kernels
[I 16:36:58.274 NotebookApp] The Jupyter Notebook is running at: http://localhost:8889/?token=bb8
[I 16:36:58.274 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice t
[C 16:36:58.276 NotebookApp]

Copy/paste this URL into your browser when you connect for the first time,
to login with a token:
http://localhost:8889/?token=bb80a3567ad669d945f002ee86cff04ff8c23371e2d4939f
[I 16:36:58.432 NotebookApp] Accepting one-time-token-authenticated connection from ::1
```

a webbrowser opens automatically and you can open a new notebook via menu point "New" -> Python 3



test if you really have tf v 1.0.0 with:

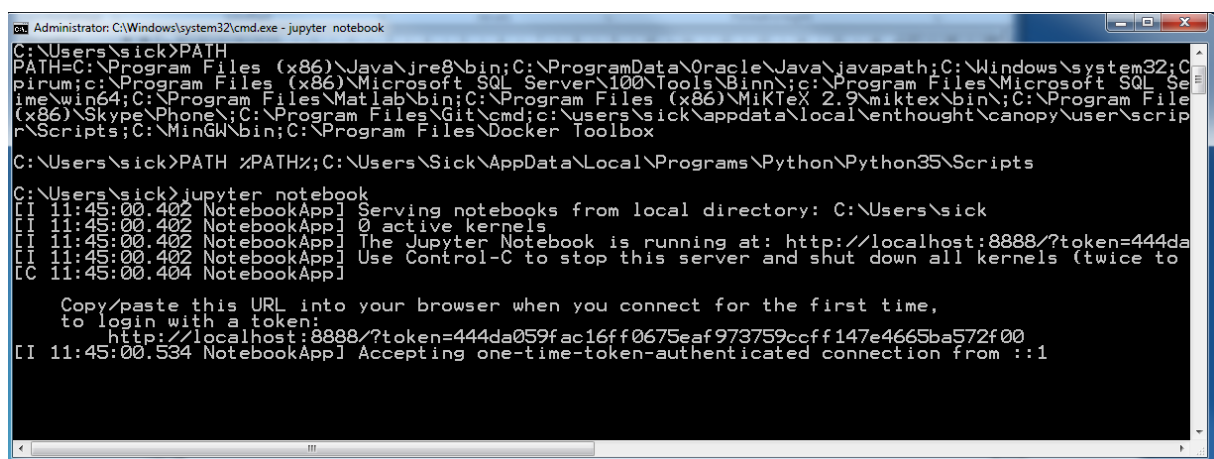


(Use menu point „insert“ to insert a new cell in notebook, run the cell with the menu point “cell” -> run cell or with the key combination “shift enter”).

Add path to python 3.5-directory to PATH variable, so that you can call jupyter from any location:

Type command in cmd-terminal:

```
PATH %PATH%; C:\Users\Sick\AppData\Local\Programs\Python\Python35\Scripts
Jupyter notebook
```



Now a browser with jupyter opens in the directory from where you have called `jupyter notebook`.