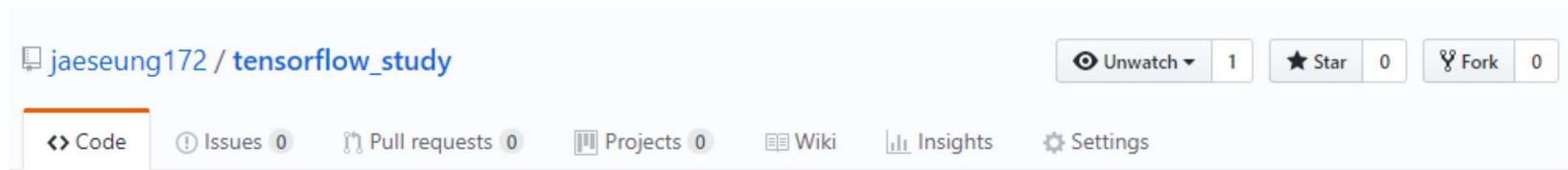


# Hello TensorFlow!

- Install TensorFlow in **Windows**
- How To Use Python-3?
- How to Use Tensorflow?



00. Please...



Click  
**Star!**

If You Have  
**Issue!**  
Leave, I'll answer

If you've SAW some error, Please  
**Pull Requests!**  
I'll Merge it

# 01. Let's Install Tensorflow!

# 01. Let's Install Anaconda.

- It's A Python & R distribution for Large-Scale Data Processing, Predictive Analysis and Scientific Computing
- It's Battery Included - Just Install and Ride!
  - Unfortunately, You need to Install TensorFlow!
- This Tutorial is Based On Windows 10 X64 Bit Version
- It have 2 Ways to Install TensorFlow → CPU, GPU
  - CPU → pip install tensorflow
  - GPU → pip install tensorflow-gpu & **CUDA + CuDNN**

# 01. Let's Install Anaconda...

:: Download Link

<https://www.anaconda.com/download/>



Windows



macOS



Linux

## Anaconda 5.0.1 For Windows Installer

### Python 3.6 version \*

↓ Download

[64-Bit Graphical Installer \(515 MB\)](#) ⓘ

[32-Bit Graphical Installer \(420 MB\)](#)

### Python 2.7 version \*

↓ Download

[64-Bit Graphical Installer \(500 MB\)](#) ⓘ

[32-Bit Graphical Installer \(403 MB\)](#)

[Behind a firewall?](#)

[How to get Python 3.5 or other Python versions](#)

[How to Install ANACONDA](#)

# 01. Let's Install Anaconda...

- Download and Open a Executive Installer
- Agree Of Some License
- Let's Check Drive have at least 1 GB of Extra Storage
- Check Python PATH to Windows PATH
  - You can Easily Check, Type **python** or **pip** (PyPI Installer)

# 01. Let's Install Anaconda...

- CPU (**It'll Slow When You Train Deeper Network, Recommend to Use GPU**)
  - Typ pip install tensorflow
- GPU (**You'll need NVIDIA Card!**)
  - Typ pip install tensorflow-gpu to Install GPU Version.
  - Install CUDA 8.0 Driver from [NVIDIA WebSite](https://developer.nvidia.com/cuda-toolkit-archive)<sup>1</sup> (Download 8.0)
    - It'll Install a New Graphics Driver & CUDA Driver
  - Install CuDNN Components from [NVIDIA WebSite](https://developer.nvidia.com/cudnn)<sup>2</sup> (CuDNN Page)
    - Sign Up NVIDIA Developer Website
    - Download CuDNN 6 Zipped File and Extract it
    - Go to Your Directory (C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA\v8.0) and Copy CuDNN Components to Exact Directory (It'll need Administrator Permission, Grant it.)

[1]: <https://developer.nvidia.com/cuda-toolkit-archive>

[2]: <https://developer.nvidia.com/cudnn>



# 01. Let's Install Anaconda...

Previous releases of the CUDA Toolkit, GPU Computing SDK, documentation and developer drivers can be found using the links below. Please select the release you want from the list below, and be sure to check [www.nvidia.com/drivers](http://www.nvidia.com/drivers) for more recent production drivers appropriate for your hardware configuration.

[Download CUDA Toolkit 9.0](#)

[Learn More about CUDA Toolkit 9](#)

## ~~Latest Release~~

~~CUDA Toolkit 9.0 (Sept 2017)~~

## Archived Releases

CUDA Toolkit 8.0 GA2 (Feb 2017)

CUDA Toolkit 8.0 GA1 (Sept 2016)

CUDA Toolkit 7.5 (Sept 2015)

CUDA Toolkit 7.0 (March 2015)

CUDA Toolkit 6.5 (August 2014)

CUDA Toolkit 6.0 (April 2014)

CUDA Toolkit 5.5 (July 2013)

CUDA Toolkit 5.0 (Oct 2012)

SKIP WHEN YOU'R USING CPU VERSION

☒ I Agree To the Terms of the [cuDNN Software License Agreement](#)

Note: Please refer to the [Installation Guide](#) for release prerequisites, including supported GPU architectures and compute capabilities, before downloading.

For more information, refer to the cuDNN Developer Guide, Installation Guide and Release Notes on the [Deep Learning SDK Documentation](#) web page.

[Download cuDNN v7.0.4 \[Nov 13, 2017\], for CUDA 9.0](#)

[Download cuDNN v7.0.4 \[Nov 13, 2017\], for CUDA 8.0](#)

[Download cuDNN v6.0 \[April 27, 2017\] for CUDA 8.0](#)

Download packages updated April 27, 2017 to resolve issues related to dilated convolution on Kepler Architecture GPUs.

[cuDNN User Guide](#)

[cuDNN Install Guide](#)

[cuDNN v6.0 Library for Linux](#)

[cuDNN v6.0 Library for Power8](#)

[cuDNN v6.0 Library for Windows 7](#)

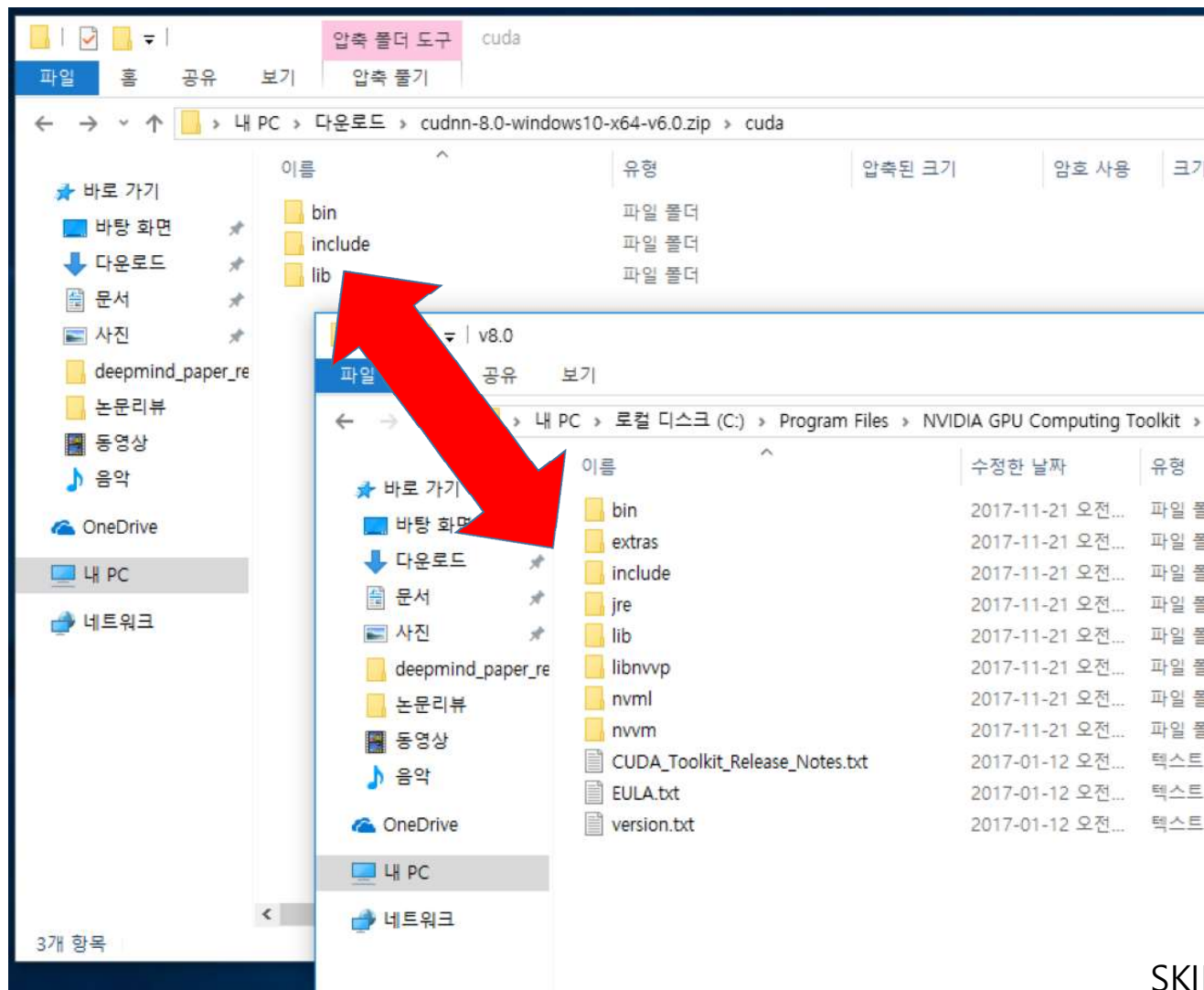
[cuDNN v6.0 Library for Windows 10](#)

[cuDNN v6.0 Library for OSX](#)

[cuDNN v6.0 Release Notes](#)

[cuDNN v6.0 Release Notes for Ubuntu 14.04 \(Bionic Beaver\)](#)

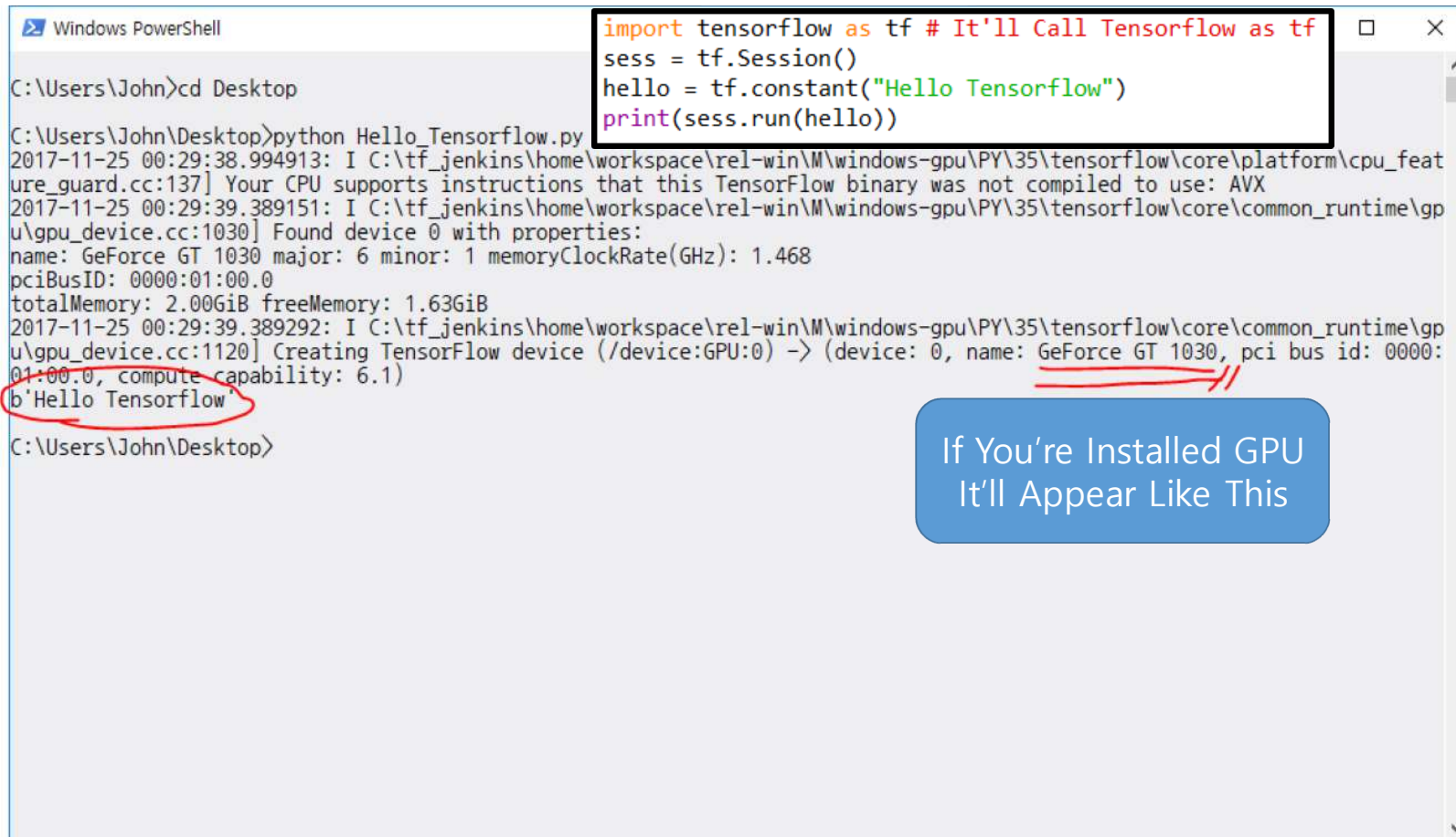
SKIP WHEN YOU'R USING CPU VERSION



1. Open Each Directory
2. Drag and Drop File To Same Named Directory On NVIDIA Folder

SKIP WHEN YOU'R USING CPU VERSION

# 01. Let's Install Anaconda...



```
Windows PowerShell

C:\Users\John>cd Desktop

C:\Users\John\Desktop>python Hello_Tensorflow.py
2017-11-25 00:29:38.994913: I C:\tf_jenkins\home\workspace\rel-win\M\windows-gpu\PY\35\tensorflow\core\platform\cpu_feature_guard.cc:137] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX
2017-11-25 00:29:39.389151: I C:\tf_jenkins\home\workspace\rel-win\M\windows-gpu\PY\35\tensorflow\core\common_runtime\gpu\gpu_device.cc:1030] Found device 0 with properties:
name: GeForce GT 1030 major: 6 minor: 1 memoryClockRate(GHz): 1.468
pciBusID: 0000:01:00.0
totalMemory: 2.00GiB freeMemory: 1.63GiB
2017-11-25 00:29:39.389292: I C:\tf_jenkins\home\workspace\rel-win\M\windows-gpu\PY\35\tensorflow\core\common_runtime\gpu\gpu_device.cc:1120] Creating TensorFlow device (/device:GPU:0) -> (device: 0, name: GeForce GT 1030, pci bus id: 0000:01:00.0, compute capability: 6.1)
b'Hello Tensorflow'

C:\Users\John\Desktop>
```

```
import tensorflow as tf # It'll Call Tensorflow as tf
sess = tf.Session()
hello = tf.constant("Hello Tensorflow")
print(sess.run(hello))
```

If You're Installed GPU  
It'll Appear Like This

It's Finished!