



NVIDIA QUADRO<sup>®</sup>  
AUTHORISED PARTNER  
丽台中国

ready



# DIGITS 简易安装

- `sudo dpkg -i cuda-repo-ubuntu1404_8.0.61-1_amd64.deb`
- `sudo dpkg -i nv-deep-learning-repo-ubuntu1404-ga-cuda8.0-cudnn5.1.10_1-1_amd64.deb`
- `sudo apt-get update`
- `sudo apt-get install cuda`
- `Sudo apt-get install digits`

# DIGITS源码安装

- 1. 安装依赖deb包
- 2. 安装CUDA, cuDNN, NCCL
- 3. 编译Caffe
- 4. 编译安装Digits

# 1. 安装依赖deb包

- `sudo apt-get install --no-install-recommends build-essential cmake git gfortran libatlas-base-dev libboost-filesystem-dev libboost-python-dev libboost-system-dev libboost-thread-dev libgflags-dev libgoogle-glog-dev libhdf5-serial-dev libleveldb-dev liblmdb-dev libopencv-dev libprotobuf-dev libsnpappy-dev protobuf-compiler python-all-dev python-dev python-h5py python-matplotlib python-numpy python-opencv python-pil python-pip python-protobuf python-scipy python-skimage python-sklearn`

# 1. 安装deb依赖包

- `sudo apt-get install --no-install-recommends graphviz python-flask python-flaskext.wtf python-gevent python-pil python-tk`

## 2. 安装CUDA

- 下载CUDA安装包
- 网址：
- deb安装方法：<https://developer.nvidia.com/cuda-downloads>
- `sudo dpkg -i cuda-repo-ubuntu1404_8.0.44-1_amd64.deb`
- `sudo apt-get update`
- `sudo apt-get install cuda`

## 2. 安装CUDA

- 重启计算机加载显卡驱动
- 配置开发环境  
`export`  
`PATH=/usr/local/cuda/bin:$PATH`
- `export`  
`LD_LIBRARY_PATH=/usr/local/cuda/lib64:$LD_LIBRARY_PATH`

### 3. 安装cuDNN

- 下载网址: <https://developer.nvidia.com/cudnn>

#### cuDNN Download

NVIDIA cuDNN is a GPU-accelerated library of primitives for deep neural networks.

☒ I Agree To the Terms of the **cuDNN Software License Agreement**

Please check your framework documentation to determine the recommended version of cuDNN.

If you are using cuDNN with a Pascal (GTX 1080, GTX 1070), version 5 or later is required.

Download cuDNN v5.1 (Jan 20, 2017), for CUDA 8.0

Download cuDNN v5.1 (Jan 20, 2017), for CUDA 7.5

Download cuDNN v5 (May 27, 2016), for CUDA 8.0

Download cuDNN v5 (May 12, 2016), for CUDA 7.5

Download cuDNN v4 (Feb 10, 2016), for CUDA 7.0 and later.

Archived cuDNN Releases



### 3. 安装cuDNN

- `tar xzvf cudnn-8.0-linux-x64-v5.1-ga.tgz`
- `sudo cp -P cuda/include/cudnn.h /usr/local/cuda/include`
- `sudo cp -P cuda/lib64/libcudnn* /usr/local/cuda/lib64`
- `sudo chmod a+r /usr/local/cuda/include/cudnn.h \`  
`/usr/local/cuda/lib64/libcudnn*`
- `sudo ldconfig`

## 4. 安装NCCL

### ➤ 下载源码

- `git clone https://github.com/NVIDIA/nccl.git`

### ➤ build

- `cd nccl`

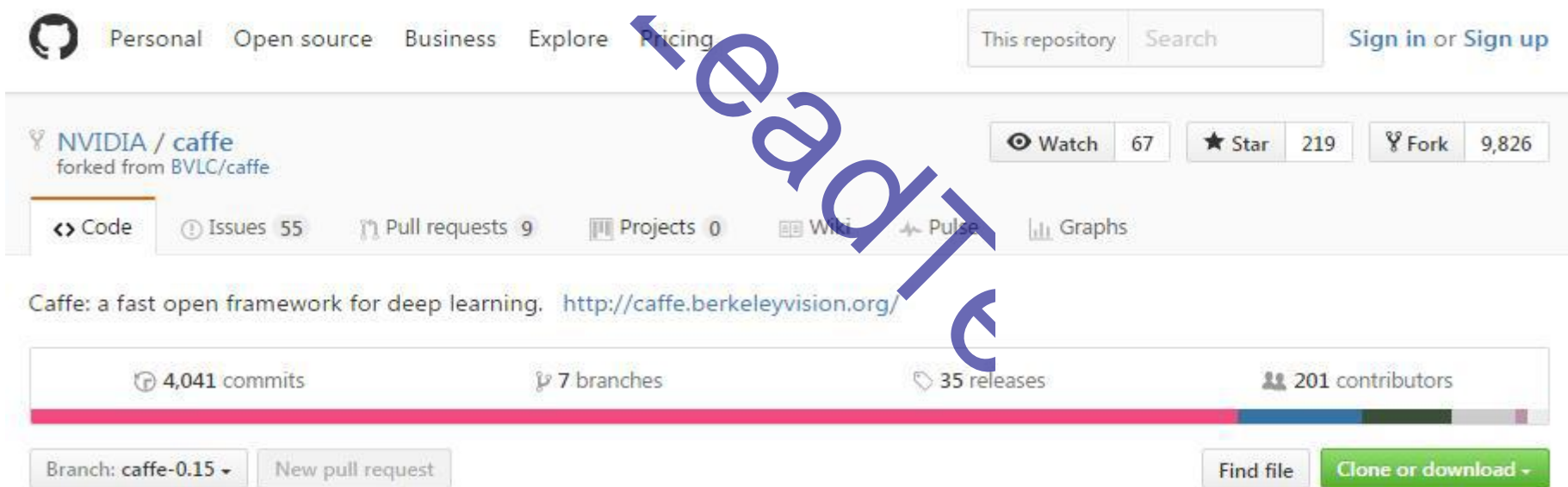
- `make CUDA_HOME=<cuda install path> test`

### ➤ install

- `make install`

## 5. 获取CAFFE-SOURCE

- `export Caffe_ROOT=~ /caffe`
- `git clone https://github.com/NVIDIA/caffe.git $Caffe_ROOT`



## 6. 编译CAFFE

- `cd $CAFFE_ROOT`
- `mkdir build`
- `cd build`
- `cmake ..`
- `make --jobs=4`

readme

## 7. DIGITS安装

- 获取源码

- `export DIGITS_ROOT=~ /digits`

- `git clone https://github.com/NVIDIA/DIGITS.git`  
`$DIGITS_ROOT`

- 启用插件

- `sudo pip install -e $DIGITS_ROOT`

- 启动server

- `./digits-devserver`

# 感谢



NVIDIA QUADRO  
AUTHORISED PARTNER  
丽台中国

samson\_shang@leadtek.com.cn

leadtek



## Select Target Platform


Click on the green buttons that describe your target platform. Only supported platforms will be shown.

Operating System

Windows

Linux

Mac OSX

Architecture 

x86\_64

Distribution

Fedora

OpenSUSE

RHEL

CentOS

SLES

Ubuntu

Version

16.04

14.04

Installer Type 

runfile (local)

deb (local)

deb (network)

cluster (local)

## Related Links

[CUDA Quick Start Guide](#)

[Release Notes](#)

[EULA](#)

[Online Documentation](#)

[CUDA Toolkit Overview](#)

[Installer Checksums](#)


[Open Source Packages](#)

[Legacy CUDA Toolkits](#)

## Download Installer for Linux Ubuntu 14.04 x86\_64

The base installer is available for download below.

### > Base Installer

Download (2.6 KB) 

Installation Instructions:

1. `sudo dpkg -i cuda-repo-ubuntu1404_8.0.61-1_amd64.deb`
2. `sudo apt-get update`
3. `sudo apt-get install cuda`



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Pulse

Graphs

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98 commits

3 branches

10 releases

13 contributors

Branch: master ▼

New pull request

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Deep Learning GPU Training System <https://developer.nvidia.com/digits>

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gpu

caffe

torch

1,470 commits

8 branches

33 releases

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BSD-3-Clause

Branch: master

New pull request

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