Ubuntu18.04安装caffe+cuda+cudnn+anaconda

主要链接

cuda简介

基本软件的链接

- 1. 搜狗输入法
- 2. Markdown下载
- 3. Ubuntu换源
- 4. codeblocks的安装
- 5. Opencv的下载地址
- 6. Deepin Screenshot
- 7. 网易云音乐

安装出现的问题

1. gcc降版本问题

解决方法:链接

2. sudo make runtest -j4 编译出现问题

解决方案1:链接

解决方案2:链接

3. sudo make runtest -j4 编译出现问题

```
[sudo] password for gavin:
.build_release/tools/caffe/ideos
.build_release/tools/caffe: error while loading shared libraries: libhdf5_hl.so.
100: cannot open shared object file: No such file or directory
Makefile:543: recipe for target 'runtest' failed
make: *** [runtest] Error 127
gavin@gavin-X550JX:~/Machine/caffe$ [
```

解决方案1:链接

修改后: sudo cp -s /home/gavin/anaconda3/pkgs/hdf5-1.10.2-hba1933b_1/lib/libhdf5_hl.so.100 /usr/lib/libhdf5_hl.so.100

4. sudo make runtest -j4 编译出现问题

```
gavin@gavin-X550JX:~/Machine/caffe$ sudo make runtest -j4
.build_release/tools/caffe
.build_release/tools/caffe: error while loading shared libraries: libcudnn.so.7:
cannot open shared object file: No such file or directory
Makefile:543: recipe for targeta/runtest/sfailed
make: *** [runtest] Error_127
mak
```

解决方案1:链接

5. import caffe 出现问题

```
su: Authentication failure

gavin@gavin-X550JX:~$ python

Python 3.6.5 |Anaconda, Inc.| (default, Apr 29 2018, 16:14:56)

[GCC 7.2.0] on linux

Type "help", "copyright", "credits" or "license" for more information.

>>> import caffe

Traceback (most recent call last):

File "<stdin>", line 1, in <module>

ModuleNotFoundError: No module named 'caffe'
```

解决方案:链接

6. import caffe 出现问题

```
File Edit View Search Terminal Help

gavin@gavin-X550JX:~$ python

Python 3.6.5 |Anaconda, Inc.| (default, Apr 29 2018, 16:14:56)

[GCC 7.2.0] on linux

Type "help", "copyright", "credits" or "license" for more information.

>>> import caffe

Traceback (most recent call last):
    File "/home/gavin/Machine/caffe/python/caffe/__init__.py", line 1, in <module>
        from .pycaffe import Net, SGDSolver, NesterovSolver, AdaGradSolver, RMSPropS

olver, AdaDeltaSolver, AdamSolver, NCCL, Timer
    File "/home/gavin/Machine/caffe/python/caffe/pycaffe.py", line 13, in <module>
        from ._caffe import Net, SGDSolver, NesterovSolver, AdaGradSolver, 12

ImportError: /home/gavin/Machine/caffe/python/caffe/_caffe.so: undefined symbol:
    _ZNSboost6python6detail11init_moduleER11PyModuleDefPFvvE

>>>
```

解决方案:

7. import caffe

```
gavin@gavin-X550JX:~/Machine/caffe$ python
Python 3.6.5 |Anaconda, Inc.| (default, Apr 29 2018, 16:14:56)
[GCC 7.2.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import caffe
/home/gavin/anaconda3/lib/python3.6/site-packages/matplotlib/font_manager.py:278
: UserWarning: Matplotlib is building the font cache using fc-list. This may tak
e a moment.
    'Matplotlib is building the font cache using fc-list. '
>>>
```

解决方案:

8. 显存问题

```
File Edit View Search Terminal Help
I0319 11:18:31.962991 14430 layer_factory.hpp:77] Creating layer mnist
F0319 11:18:31.963063 14430 db lmdb.hpp:15] Check failed: mdb status == 0 (2 vs.
No such file or directory
*** Check failure stack trace: ***
  0x7fdced3e60cd google::LogMessage::Fail()
   0x555b55253cf0 1main16 mar
   0
       0x7fdcec1e6b97 112libc_start6main18 libboost serialization.a
   0
    uxrwx<mark>0x555b5525464a _stagt mar 6 2018 libboost_serialization.so -> libbo</mark>
   0
Aborted (core dumped) 1 6
gavin@gavin-X550JX:~/Machine/caffeS
```

解决方案:链接

• 测试网络

链接

```
[0319 12:06:53.748276 16571 caffe.cpp:304] Batch 35, loss = 0.140433
[0319 12:06:53.780966 16571 caffe.cpp:304] Batch 36, accuracy = 1
[0319 12:06:53.781074 16571 caffe.cpp:304] Batch 36, loss = 0.00396757
[0319_12:06:53.813673_16571_caffe.cpp:304] Batch 37, accuracy = 0.98
[0319 12:06:53.813791 16571 caffe.cpp:304] Batch 37, loss = 0.0381075
10319 12:06:53.848047 16571 caffe.cpp:304] Batch 38, accuracy = 1
10319 12:06:53.848166 16571 caffe.cpp:304] Batch 38, loss = 0.0158747
[0319 12:06:53.881307 16571 caffe.cpp:304] Batch 39, loss = 0.0489041
[0319 12:06:53.916306 16571 caffe.cpp:304] Batch 40, accuracy = 0.98
[0319_12:06:53.916415_16571_caffe.cpp:304] Batch 40, loss = 0.0401237
[0319 12:06:53.949463 16571 caffe.cpp:304] Batch 41, accuracy = 0.98
[0319 12:06:53.949578 16571 caffe.cpp:304] Batch 41, loss = 0.0537366
[0319 12:06:53.985255 16571 caffe.cpp:304] Batch 42, accuracy = 1
[0319 12:06:53.985368 16571 caffe.cpp:304] Batch 42, loss = 0.0389257
[0319 12:06:54.019116 16571 caffe.cpp:304] Batch 43, accuracy = 0.99
[0319 12:06:54.019237 16571 caffe.cpp:304] Batch 43, loss = 0.016208
[0319 12:06:54.052184 16571 caffe.cpp:304] Batch 44, accuracy = 0.99
[0319 12:06:54.052307 16571 caffe.cpp:304] Batch 44, loss = 0.0381282
[0319 12:06:54.085978 16571 caffe.cpp:304] Batch 45, accuracy = 0.99
[0319 12:06:54.086102 16571 caffe.cpp:304] Batch 45, loss = 0.0306271
[0319 12:06:54.121176 16571 caffe.cpp:304] Batch 46, accuracy = 1
[0319 12:06:54.121292 16571 caffe.cpp:304] Batch 46, loss = 0.0110604
[0319 12:06:54.156205 16571 caffe.cpp:304] Batch 47, accuracy = 1
[0319 12:06:54.156319 16571 caffe.cpp:304] Batch 47, loss = 0.00743864
[0319 12:06:54.191968 16571 caffe.cpp:304] Batch 48, accuracy = 0.97
[0319 12:06:54.192086 16571 caffe.cpp:304] Batch 48, loss = 0.0676722
[0319 12:06:54.227325 16571 caffe.cpp:304] Batch 49, accuracy = 1
[0319 12:06:54.227447 16571 caffe.cpp:304] Batch 49, loss = 0.0130438
[0319 12:06:54.227494 16571 caffe.cpp:309] Loss: 0.0419432
[0319 12:06:54.227540 16571 caffe.cpp:321] accuracy = 0.987
[0319 12:06:54.227591 16571 caffe.cpp:321] loss = 0.0419432 (* 1 = 0.0419432 loss)
```

<u>链接1</u> <u>链接2</u>