


本网站只是学习用途----

by cestlavie

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用一个Inception v3 架构模型实现简单的迁移学习（译：../tensorflow/tensorflow/examples/image_retraining/retrain.py）

 `view retrain using py`

#英语能力有限，哈哈，原文链接：https://github.com/tensorflow/tensorflow/blob/master/tensorflow/examples/image_retraining/retrain.py

由于时间的原因，我在编译完3的时候被我切断了。四组图片28*28的，每组6000张左右，设置train：validation：test = 4：1：1。编译的照片在TRAINIMAGE，运行的照片在VALIDATEIMAGE，训练了两天半（56个小时）。最后的识别结果如下：

```
1、编译0,1,2,3。
user01@user01-forfish:~/Documents/tensorflow$ bazel-bin/tensorflow/examples/image_retraining/retrain --image_dir
~/FISHMNIST2/TRAINIMAGE/
Looking for images in '1'
Looking for images in '0'
Looking for images in '3'
```

公告

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<	2017年10月						>
日	一	二	三	四	五	六	
24	25	26	27	28	29	30	
1	2	3	4	5	6	7	
8	9	10	11	12	13	14	
15	16	17	18	19	20	21	
22	23	24	25	26	27	28	
29	30	31	1	2	3	4	

Looking for images in '2'
100 bottleneck files created.
200 bottleneck files created.
300 bottleneck files created.
400 bottleneck files created.
.....
24300 bottleneck files created.
24400 bottleneck files created.
24500 bottleneck files created.
24600 bottleneck files created.
24700 bottleneck files created.
2016-04-07 16:03:35.848447: Step 0: Train accuracy = 56.0%
2016-04-07 16:03:35.848516: Step 0: Cross entropy = 1.286888
2016-04-07 16:03:36.059755: Step 0: Validation accuracy = 35.0%
2016-04-07 16:03:37.677323: Step 10: Train accuracy = 92.0%
2016-04-07 16:03:37.677392: Step 10: Cross entropy = 0.810003
2016-04-07 16:03:37.817034: Step 10: Validation accuracy = 84.0%
2016-04-07 16:03:39.249091: Step 20: Train accuracy = 93.0%
2016-04-07 16:03:39.249168: Step 20: Cross entropy = 0.611544
.....
2016-04-07 16:07:54.362384: Step 3980: Validation accuracy = 99.0%
2016-04-07 16:07:54.905122: Step 3990: Train accuracy = 100.0%
2016-04-07 16:07:54.905188: Step 3990: Cross entropy = 0.028465
2016-04-07 16:07:54.954875: Step 3990: Validation accuracy = 99.0%
2016-04-07 16:07:55.431090: Step 3999: Train accuracy = 100.0%
2016-04-07 16:07:55.431152: Step 3999: Cross entropy = 0.044311
2016-04-07 16:07:55.480975: Step 3999: Validation accuracy = 97.0%
Final test accuracy = 99.0%
Converted 2 variables to const ops.

2、使用以上的编译结果。

（1）识别手写0：

搜索

找找看

谷歌搜索

我的标签
Tensorflow retraining(2)
travel(1)
tensorflow machine learning(1)

随笔分类
0title(13)
2title(3)
3title(5)
5title(9)
Bazel base usage in C++
my way(4)

```
user01@user01-forfish:~/Documents/tensorflow$ bazel build tensorflow/examples/label_image:label_image && \
> bazel-bin/tensorflow/examples/label_image/label_image \
> --graph=/tmp/output_graph.pb --labels=/tmp/output_labels.txt \
> --output_layer=final_result \
> --image=$HOME/FISHMNIST2/VALIDATEIMAGE/0/MUSIC-1383.jpg
.....
INFO: Found 1 target...
Target //tensorflow/examples/label_image:label_image up-to-date:
  bazel-bin/tensorflow/examples/label_image/label_image
INFO: Elapsed time: 42.557s, Critical Path: 23.00s
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in
.....
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
I tensorflow/examples/label_image/main.cc:207] 0 (1): 0.999816
I tensorflow/examples/label_image/main.cc:207] 2 (3): 0.000103101
I tensorflow/examples/label_image/main.cc:207] 3 (2): 7.5385e-05
I tensorflow/examples/label_image/main.cc:207] 1 (0): 5.35907e-06
```

（2）识别手写1：

```
user01@user01-forfish:~/Documents/tensorflow$ bazel build tensorflow/examples/label_image:label_image && bazel-
bin/tensorflow/examples/label_image/label_image --graph=/tmp/output_graph.pb --labels=/tmp/output_labels.txt --
output_layer=final_result --image=$HOME/FISHMNIST2/VALIDATEIMAGE/1/JAVA-10000.jpg
INFO: Found 1 target...
Target //tensorflow/examples/label_image:label_image up-to-date:
  bazel-bin/tensorflow/examples/label_image/label_image
```

Mydriver1(15)
Mydriver2(11)
opencv-我只是一个搬运工
Tensorflow(3)
TensorFlow Examples Learning
裸机1-detail(37)
裸机2-detail(18)
嵌入式基础0(18)
嵌入式基础1(17)

随笔档案

2016年5月 (1)
2016年4月 (3)
2016年2月 (119)

INFO: Elapsed time: 0.196s, Critical Path: 0.00s

W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use tf.nn.batch_normalization().

W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use tf.nn.batch_normalization().

W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use tf.nn.batch_normalization().

W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use tf.nn.batch_normalization().

W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in

.....

W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use tf.nn.batch_normalization().

W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use tf.nn.batch_normalization().

W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use tf.nn.batch_normalization().

I tensorflow/examples/label_image/main.cc:207] 1 (0): 0.999564

I tensorflow/examples/label_image/main.cc:207] 2 (3): 0.000373375

I tensorflow/examples/label_image/main.cc:207] 3 (2): 4.03145e-05

I tensorflow/examples/label_image/main.cc:207] 0 (1): 2.2671e-05

(2) 识别手写2:

```
user01@user01-forfish:~/Documents/tensorflow$ bazel build tensorflow/examples/label_image:label_image && bazel-  
bin/tensorflow/examples/label_image/label_image --graph=/tmp/output_graph.pb --labels=/tmp/output_labels.txt --  
output_layer=final_result --image=$HOME/FISHMNIST2/VALIDATEIMAGE/2/CHUAN-10006.jpg
```

INFO: Found 1 target...

Target //tensorflow/examples/label_image:label_image up-to-date:

bazel-bin/tensorflow/examples/label_image/label_image

INFO: Elapsed time: 0.146s, Critical Path: 0.00s

W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use

2015年1月 (30)

最新评论

1. Re:17.信号量同步编程

其实互斥和同步就是资源分配
一个占用后释放; 一个是生产后给予
原理差不多
这样粗浅的理解可以吧?

--fhx

阅读排行榜

1. 3.Arm机器码(1474)

2. 用一个Inception v3 架构模型实现简单的迁移学习 (译: ../tensorflow/tensorflow/examples/image_retraining/retrain.py) (1141)

3. 5.安装 Linux 系统到开发板(680)

4. 5.按键定时器去抖动(329)

5. 9.NandFlash的驱动_读操作2440(321)

```
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
.....
GraphDef version 9. Use tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
I tensorflow/examples/label_image/main.cc:207] 2 (3): 0.99146
I tensorflow/examples/label_image/main.cc:207] 3 (2): 0.00433606
I tensorflow/examples/label_image/main.cc:207] 1 (0): 0.00381229
I tensorflow/examples/label_image/main.cc:207] 0 (1): 0.000391908
```

（3）识别手写3：

```
user01@user01-forfish:~/Documents/tensorflow$ bazel build tensorflow/examples/label_image:label_image && bazel-
bin/tensorflow/examples/label_image/label_image --graph=/tmp/output_graph.pb --labels=/tmp/output_labels.txt --
output_layer=final_result --image=$HOME/FISHMNIST2/VALIDATEIMAGE/3/YAHOO-1089.jpg
INFO: Found 1 target...
Target //tensorflow/examples/label_image:label_image up-to-date:
  bazel-bin/tensorflow/examples/label_image/label_image
INFO: Elapsed time: 0.121s, Critical Path: 0.00s
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
```

评论排行榜

1. 17.信号量同步编程(1)

推荐排行榜

1. 1.ARM寄存器简解(1)

2. 13.无名管道通讯编程(1)

3. 17.sudo 用户管理(1)

4. 5.安装 Linux 系统到开发板(1)

5. 图像识别(1)

```
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in
.....
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
W tensorflow/core/kernels/batch_norm_op.cc:36] Op is deprecated. It will cease to work in GraphDef version 9. Use
tf.nn.batch_normalization().
I tensorflow/examples/label_image/main.cc:207] 3 (2): 0.99796
I tensorflow/examples/label_image/main.cc:207] 2 (3): 0.00196124
I tensorflow/examples/label_image/main.cc:207] 0 (1): 5.19803e-05
I tensorflow/examples/label_image/main.cc:207] 1 (0): 2.67401e-05
```

识别率还是蛮高的。

我是一只菜鸟！FORFISH!

分类: Tensorflow

标签: Tensorflow retraining

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» 下一篇：图像识别

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