## catDog

68 Total params: 1,192,962

```
1 D:\ProgramData\Miniconda3\envs\ml\python.exe C:/Users/Mute/source/deepLearn/catAndDog/catDog.py
 2 2020-12-13 10:44:04.946818: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cudart64_101.dll
  2020-12-13 10:44:07.000070: I tensorflow/stream executor/platform/default/dso loader.cc:48] Successfully opened dynamic
   library nvcuda.dll
 4\ 2020-12-13\ 10:44:07.024394:\ I\ tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1716]\ Found\ device\ 0\ with\ properties:
 5 pciBusID: 0000:01:00.0 name: GeForce GTX 1070 computeCapability: 6.1
 6 coreClock: 1.645GHz coreCount: 16 deviceMemorySize: 8.00GiB deviceMemoryBandwidth: 238.66GiB/s
 7 2020-12-13 10:44:07.024699: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cudart64 101.dll
 8 2020-12-13 10:44:07.028441: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cublas64_10.dll
 9 2020-12-13 10:44:07.032312: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cufft64 10.dll
10\ 2020-12-13\ 10:4\overline{4}:07.033488:\ I\ tensorflow/stream\_executor/platform/default/dso\_loader.cc:48]\ Successfully\ opened\ dynamic
   library curand64 10.dll
11 2020-12-13 10:44.07.037477: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cusolver64_10.dll
12 2020-12-13 10:44:07.039650: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cusparse64 10.dll
13 2020-12-13 10:44:07.048554: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cudnn64_7.dll
14 2020-12-13 10:44:07.048768: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1858] Adding visible gpu devices: 0
15 2020-12-13 10:44:07.049125: I tensorflow/core/platform/cpu_feature_guard.cc:142] This TensorFlow binary is optimized
   with oneAPI Deep Neural Network Library (oneDNN) to use the following CPU instructions in performance-critical operations
    AVX2
16 To enable them in other operations, rebuild TensorFlow with the appropriate compiler flags.
17 2020-12-13 10:44:07.057440: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x1c06be236e0 initialized for
   platform Host (this does not guarantee that XLA will be used). Devices:
18 2020-12-13 10:44:07.057830: I tensorflow/compiler/xla/service/service.cc:176] StreamExecutor device (0): Host, Default
19 2020-12-13 10:44:07.058248: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1716] Found device 0 with properties:
20 pciBusID: 0000:01:00.0 name: GeForce GTX 1070 computeCapability: 6.1
21 coreClock: 1.645GHz coreCount: 16 deviceMemorySize: 8.00GiB deviceMemoryBandwidth: 238.66GiB/s
22 2020-12-13 10:44:07.058818: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cudart64_101.dll
23 2020-12-13 10:44:07.059022: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cublas64_10.dll
24 2020-12-13 10:44:07.059186: I tensorflow/stream executor/platform/default/dso loader.cc:48] Successfully opened dynamic
   library cufft64 10.dll
25 2020-12-13 10:44:07.059350: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library curand64 10.dll
26 2020-12-13 10:44:07.059511: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cusolver64_10.dll
27 2020-12-13 10:44:07.059675: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cusparse64 10.dll
28 2020-12-13 10:44:07.059843: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
   library cudnn64_7.dll
29 2020-12-13 10:44:07.060029: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1858] Adding visible gpu devices: 0
30 2020-12-13 10:44:07.663134: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1257] Device interconnect StreamExecutor
   with strength 1 edge matrix:
33 2020-12-13 10:44:07.663720: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1402] Created TensorFlow device (/job:
   localhost/replica:0/task:0/device:GPU:0 with 6709 MB memory) -> physical GPU (device: 0, name: GeForce GTX 1070, pci bus
    id: 0000:01:00.0, compute capability: 6.1)
34 2020-12-13 10:44:07.666547: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x1c014928cc0 initialized for
platform CUDA (this does not guarantee that XLA will be used). Devices:
35 2020-12-13 10:44:07.666765: I tensorflow/compiler/xla/service/service.cc:176] StreamExecutor device (0): GeForce GTX
   1070, Compute Capability 6.1
36 Found 4000 images belonging to 2 classes.
37 Found 1000 images belonging to 2 classes.
38 Model: "sequential"
39
                                                           Param #
40 Layer (type)
                                Output Shape
42 conv2d (Conv2D)
                                (None, 198, 198, 128)
                                                           3584
43
                                                           147584
44
  conv2d 1 (Conv2D)
                                (None, 196, 196, 128)
45
46 max_pooling2d (MaxPooling2D) (None, 98, 98, 128)
48 conv2d_2 (Conv2D)
                                (None, 96, 96, 64)
                                                           73792
49
50 conv2d_3 (Conv2D)
                                (None, 94, 94, 64)
                                                           36928
51
52 max_pooling2d_1 (MaxPooling2 (None, 47, 47, 64)
53
  conv2d_4 (Conv2D)
                                (None, 45, 45, 32)
                                                           18464
54
55
56 conv2d 5 (Conv2D)
                                                           9248
                                (None, 43, 43, 32)
58 max_pooling2d_2 (MaxPooling2 (None, 21, 21, 32)
                                                           0
59
60 flatten (Flatten)
                                                           0
                                 (None, 14112)
61
62 dense (Dense)
                                (None, 64)
                                                           903232
63
64 dropout (Dropout)
                                (None, 64)
                                                           0
65
66 dense 1 (Dense)
                                 (None, 2)
                               _____
```

## catDog

```
69 Trainable params: 1,192,962
70 Non-trainable params: 0
72 WARNING:tensorflow:From C:/Users/Mute/source/deepLearn/catAndDog/catDog.pv:47: Model.fit generator (from tensorflow.
  python.keras.engine.training) is deprecated and will be removed in a future version.
73 Instructions for updating:
74 Please use Model.fit, which supports generators.
76\ 2020-12-13\ 10:44:09.262013:\ I\ tensorflow/stream\_executor/platform/default/dso\_loader.cc: 48]\ Successfully\ opened\ dynamic
  library cublas64 10.dll
77 2020-12-13 10:44:10.052436: I tensorflow/stream_executor/platform/default/dso_loader.cc:48] Successfully opened dynamic
  library cudnn64_7.dll
78 2020-12-13 10:44:11.610266: W tensorflow/stream_executor/gpu/redzone_allocator.cc:314] Internal: Invoking GPU asm
  compilation is supported on Cuda non-Windows platforms only
79 Relying on driver to perform ptx compilation.
80 Modify $PATH to customize ptxas location.
81 This message will be only logged once.
  2/125 [...................] - ETA: 14s - loss: 0.6931 - acc: 0.5469WARNING:tensorflow:Callbacks method `on_train_batch_end` is slow compared to the batch time (batch time: 0.0678s vs `on_train_batch_end` time: 0.1735s).
  Check your callbacks.
83 125/125 [=============] - 40s 317ms/step - loss: 0.6930 - acc: 0.5090 - val_loss: 0.6915 - val_acc: 0.
  5000
84 Epoch 2/50
5560
86 Epoch 3/50
6150
88 Epoch 4/50
6580
90 Epoch 5/50
91 125/125 [============== ] - 38s 306ms/step - loss: 0.5851 - acc: 0.6905 - val loss: 0.5533 - val acc: 0.
  7130
92 Epoch 6/50
93 125/125 [=============] - 38s 306ms/step - loss: 0.5596 - acc: 0.7180 - val_loss: 0.5453 - val_acc: 0.
  7060
94 Epoch 7/50
7250
96 Epoch 8/50
7090
98 Epoch 9/50
7310
100 Epoch 10/50
7280
102 Epoch 11/50
7420
104 Epoch 12/50
105 125/125 [==========] - 38s 302ms/step - loss: 0.4925 - acc: 0.7632 - val_loss: 0.5215 - val_acc: 0.
  7500
106 Epoch 13/50
107 125/125 [==========] - 38s 304ms/step - loss: 0.4776 - acc: 0.7657 - val_loss: 0.5251 - val_acc: 0.
  7310
108 Epoch 14/50
7470
110 Epoch 15/50
7430
112 Epoch 16/50
113 125/125 [============] - 38s 301ms/step - loss: 0.4480 - acc: 0.7955 - val loss: 0.5002 - val acc: 0.
  7540
114 Epoch 17/50
7570
116 Epoch 18/50
7510
118 Epoch 19/50
7330
120 Epoch 20/50
121 125/125 [============= ] - 38s 301ms/step - loss: 0.4087 - acc: 0.8160 - val loss: 0.4865 - val acc: 0.
  7750
122 Epoch 21/50
123 125/125 [============] - 38s 300ms/step - loss: 0.3919 - acc: 0.8185 - val loss: 0.4903 - val acc: 0.
  7810
124 Epoch 22/50
125 125/125 [===========] - 38s 302ms/step - loss: 0.3864 - acc: 0.8163 - val loss: 0.5004 - val acc: 0.
126 Epoch 23/50
7710
128 Epoch 24/50
```

## catDog

```
131 7780
132 Epoch 26/50
7950
134 Epoch 27/50
135 125/125 [===========] - 38s 305ms/step - loss: 0.3539 - acc: 0.8403 - val_loss: 0.4754 - val_acc: 0.
 7940
136 Epoch 28/50
7940
138 Epoch 29/50
139 125/125 [===========] - 38s 304ms/step - loss: 0.3250 - acc: 0.8575 - val_loss: 0.5124 - val_acc: 0.
 8020
140 Epoch 30/50
141 125/125 [===========] - 38s 306ms/step - loss: 0.3388 - acc: 0.8450 - val_loss: 0.4997 - val_acc: 0.
 7880
142 Epoch 31/50
7930
144 Epoch 32/50
8050
146 Epoch 33/50
8020
148 Epoch 34/50
8110
150 Epoch 35/50
151 125/125 [===========] - 37s 299ms/step - loss: 0.2865 - acc: 0.8708 - val_loss: 0.5239 - val_acc: 0.
 7890
152 Epoch 36/50
7890
154 Epoch 37/50
7970
156 Epoch 38/50
8050
158 Epoch 39/50
8100
160 Epoch 40/50
8170
162 Epoch 41/50
163 125/125 [===========] - 37s 295ms/step - loss: 0.2765 - acc: 0.8842 - val_loss: 0.4880 - val_acc: 0.
 8110
164 Epoch 42/50
8070
166 Epoch 43/50
167 125/125 [==========] - 37s 294ms/step - loss: 0.2396 - acc: 0.8997 - val_loss: 0.4880 - val_acc: 0.
 8130
168 Epoch 44/50
8120
170 Epoch 45/50
7990
172 Epoch 46/50
173 125/125 [============] - 37s 297ms/step - loss: 0.2310 - acc: 0.9045 - val_loss: 0.4893 - val_acc: 0.
 7990
174 Epoch 47/50
8240
176 Epoch 48/50
8260
178 Epoch 49/50
8140
180 Epoch 50/50
8100
182
183 进程振退代码
184
```