- 1 "C:\Program Files\Python37\python.exe" "C:/Users/
   JDEAGAN/OneDrive Environmental Protection Agency (
   EPA)/Profile/Desktop/Projects/AI/ArtificialIntel/
   BuildingIdentifier/ImageAnnotation/KerasTunerDeagan.
   py"
- 2 2021-10-12 08:53:45.948634: W tensorflow/
  stream\_executor/platform/default/dso\_loader.cc:64]
  Could not load dynamic library 'cudart64\_110.dll';
  dlerror: cudart64\_110.dll not found
- 3 2021-10-12 08:53:45.949078: I tensorflow/ stream\_executor/cuda/cudart\_stub.cc:29] Ignore above cudart dlerror if you do not have a GPU set up on your machine.
- 5 2.6.0
- 6 Found 7811 files belonging to 6 classes.
- 7 Using 6249 files for training.
- 8 2021-10-12 08:54:05.338567: W tensorflow/ stream\_executor/platform/default/dso\_loader.cc:64] Could not load dynamic library 'nvcuda.dll'; dlerror : nvcuda.dll not found
- 9 2021-10-12 08:54:05.338997: W tensorflow/ stream\_executor/cuda/cuda\_driver.cc:269] failed call to cuInit: UNKNOWN ERROR (303)
- 10 2021-10-12 08:54:05.368672: I tensorflow/ stream\_executor/cuda/cuda\_diagnostics.cc:169] retrieving CUDA diagnostic information for host: D26265VWTB0E
- 11 2021-10-12 08:54:05.369291: I tensorflow/ stream\_executor/cuda/cuda\_diagnostics.cc:176] hostname: D26265VWTB0E
- 12 2021-10-12 08:54:05.369857: 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: AVX AVX2

14 15 16 17	To enable them in other operations, rebuild TensorFlow with the appropriate compiler flags. Found 7811 files belonging to 6 classes. Using 1562 files for validation. Found 864 files belonging to 6 classes. Model: "sequential"	
19	Layer (type) Param #	Output Shape
20	=======================================	=======================================
21	rescaling (Rescaling) ) 0	(None, 256, 256, 3
22		
23	random_flip (RandomFlip) ) 0	(None, 256, 256, 3
24		
	random_rotation (RandomRotat ) 0	
26		
	conv2d (Conv2D) ) 896	(None, 254, 254, 32
28		
29	<pre>max_pooling2d (MaxPooling2D) ) 0</pre>	(None, 127, 127, 32
30		
31	conv2d_1 (Conv2D) ) 18496	(None, 125, 125, 64
32		
33	max_pooling2d_1 (MaxPooling2	(None, 62, 62, 64
34	) 0	
35	conv2d_2 (Conv2D)	(None, 60, 60, 128

```
35 )
      73856
36 __
37 max_pooling2d_2 (MaxPooling2 (None, 30, 30, 128
38 _____
                   (None, 115200
39 flatten (Flatten)
40 _____
41 dense (Dense)
                         (None, 128
            14745728
42 _____
43 dense_1 (Dense)
                         (None, 128
          16512
44 _____
45 dense_2 (Dense)
                         (None, 6
                774
47 Total params: 14,856,262
48 Trainable params: 14,856,262
49 Non-trainable params: 0
50 _____
51 Epoch 1/20
52 C:\Users\JDEAGAN\AppData\Roaming\Python\Python37\site
  -packages\keras\backend.py:4907: UserWarning: "`
  sparse_categorical_crossentropy` received `
  from_logits=True`, but the `output` argument was
  produced by a sigmoid or softmax activation and thus
  does not represent logits. Was this intended?"
    '"`sparse_categorical_crossentropy` received `
53
  from_logits=True`, but '
54 2021-10-12 08:54:07.775340: I tensorflow/compiler/
  mlir/mlir_graph_optimization_pass.cc:185] None of the
   MLIR Optimization Passes are enabled (registered 2)
    2/196 [.....] - ETA: 7:01
55
```

```
- loss: 4.0493 - accuracy: 0.2500 2021-10-12 08:
  54:14.186139: W tensorflow/core/lib/png/png_io.cc:88
  ] PNG warning: iCCP: known incorrect sRGB profile
    4/196 [.....] - ETA: 7:33
56
   - loss: 3.5838 - accuracy: 0.17192021-10-12 08:54:19
  .193953: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
57
    5/196 [.....] - ETA: 7:21
   - loss: 3.1704 - accuracy: 0.23132021-10-12 08:54:21
  .525792: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
   13/196 [>.....] - ETA: 6:55
58
   - loss: 2.1359 - accuracy: 0.34382021-10-12 08:54:39
  .352184: W tensorflow/core/lib/png/png io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
59
  46/196 [=====>.....] - ETA: 5:23
   - loss: 1.6022 - accuracy: 0.41302021-10-12 08:55:49
  .027675: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
60 47/196 [=====>.....] - ETA: 5:20
   - loss: 1.6019 - accuracy: 0.41292021-10-12 08:55:50
  .993220: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
61 56/196 [======>.....] - ETA: 4:59
   - loss: 1.5561 - accuracy: 0.42352021-10-12 08:56:09
  .856660: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
62 59/196 [=======>.....] - ETA: 4:54
   - loss: 1.5464 - accuracy: 0.42272021-10-12 08:56:16
   .533791: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
63
  60/196 [=======>.....] - ETA: 4:51
   - loss: 1.5447 - accuracy: 0.42402021-10-12 08:56:18
  .598469: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
64
  65/196 [======>.....] - ETA: 4:40
   - loss: 1.5294 - accuracy: 0.42362021-10-12 08:56:28
   .996912: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
  73/196 [=======>.....] - ETA: 4:22
65
   - loss: 1.5104 - accuracy: 0.42472021-10-12 08:56:45
```

```
65 .770502: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
   76/196 [=======>.....] - ETA: 4:15
66
   - loss: 1.5030 - accuracy: 0.42602021-10-12 08:56:
  52.031836: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
   82/196 [========>.....] - ETA: 4:02
   - loss: 1.4908 - accuracy: 0.42612021-10-12 08:57:
  04.311175: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
  87/196 [========>....] - ETA: 3:51
   - loss: 1.4830 - accuracy: 0.42422021-10-12 08:57:
  14.653076: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
  92/196 [========>....] - ETA: 3:40
   - loss: 1.4756 - accuracy: 0.42322021-10-12 08:57:
  25.435124: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
  96/196 [=========>....] - ETA: 3:32
70
   - loss: 1.4701 - accuracy: 0.42612021-10-12 08:57:
  34.110764: W tensorflow/core/lib/png/png io.cc:881
  PNG warning: iCCP: known incorrect sRGB profile
71 109/196 [==========>.....] - ETA: 3:04
   - loss: 1.4551 - accuracy: 0.43582021-10-12 08:58:
  01.464414: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
72 118/196 [==========>....] - ETA: 2:45
   - loss: 1.4468 - accuracy: 0.43512021-10-12 08:58:
  20.701000: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
73 120/196 [===========>.....] - ETA: 2:41
   - loss: 1.4442 - accuracy: 0.43672021-10-12 08:58:
  24.889874: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
74 122/196 [===========>....] - ETA: 2:37
   - loss: 1.4424 - accuracy: 0.43722021-10-12 08:58:
  29.583448: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
75 2021-10-12 08:58:30.164064: W tensorflow/core/lib/
  png/png_io.cc:88] PNG warning: iCCP: known incorrect
   sRGB profile
```

```
76 127/196 [===========>....] - ETA: 2:26
   - loss: 1.4354 - accuracy: 0.43972021-10-12 08:58:
  39.897888: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
77 130/196 [============>....] - ETA: 2:20
   - loss: 1.4376 - accuracy: 0.43942021-10-12 08:58:
  46.221026: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
78 131/196 [============>....] - ETA: 2:18
   - loss: 1.4350 - accuracy: 0.44082021-10-12 08:58:
  48.767519: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
79 134/196 [=============>....] - ETA: 2:11
   - loss: 1.4330 - accuracy: 0.44122021-10-12 08:58:
  55.353393: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
80 136/196 [============>....] - ETA: 2:07
   - loss: 1.4309 - accuracy: 0.44122021-10-12 08:58:
  59.089607: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
81 2021-10-12 08:58:59.089949: W tensorflow/core/lib/
  pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
   sRGB profile
82 155/196 [==============>.....] - ETA: 1:27
   - loss: 1.4189 - accuracy: 0.44402021-10-12 08:59:
  40.504793: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
- loss: 1.4147 - accuracy: 0.44072021-10-12 09:00:
  03.906941: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
- loss: 1.4101 - accuracy: 0.44332021-10-12 09:00:
  16.614226: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
- loss: 1.4083 - accuracy: 0.44382021-10-12 09:00:
  20.620334: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
86 196/196 [============ ] - ETA: Os
   - loss: 1.3995 - accuracy: 0.44422021-10-12 09:01:
```

```
86 04.847819: W tensorflow/core/lib/png/png_io.cc:88]
   PNG warning: iCCP: known incorrect sRGB profile
87 2021-10-12 09:01:05.036755: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
88 2021-10-12 09:01:06.216170: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
89 2021-10-12 09:01:19.390483: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
90 2021-10-12 09:01:19.849097: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
91 2021-10-12 09:01:26.970947: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
92 196/196 [============== ] - 448s 2s/
   step - loss: 1.3995 - accuracy: 0.4442 - val_loss: 1
   .3186 - val_accuracy: 0.4648
93 Epoch 2/20
step - loss: 1.3176 - accuracy: 0.4625 - val_loss: 1
   .2799 - val_accuracy: 0.4891
95 Epoch 3/20
step - loss: 1.2975 - accuracy: 0.4721 - val_loss: 1
   .2569 - val_accuracy: 0.5070
97 Epoch 4/20
step - loss: 1.2855 - accuracy: 0.4807 - val_loss: 1
   .2691 - val_accuracy: 0.5115
99 Epoch 5/20
step - loss: 1.2742 - accuracy: 0.4834 - val_loss: 1
   .2529 - val_accuracy: 0.5096
101 Epoch 6/20
step - loss: 1.2751 - accuracy: 0.4823 - val_loss: 1
   .2844 - val_accuracy: 0.4750
103 Epoch 7/20
```

```
step - loss: 1.2641 - accuracy: 0.4878 - val_loss: 1
  .2367 - val_accuracy: 0.5218
105 Epoch 8/20
step - loss: 1.2590 - accuracy: 0.4881 - val_loss: 1
  .2333 - val_accuracy: 0.5006
107 Epoch 9/20
step - loss: 1.2582 - accuracy: 0.4863 - val_loss: 1
  .2295 - val_accuracy: 0.5077
109 Epoch 10/20
step - loss: 1.2542 - accuracy: 0.4854 - val_loss: 1
  .2295 - val_accuracy: 0.5032
111 Epoch 11/20
step - loss: 1.2496 - accuracy: 0.4850 - val_loss: 1
  .2293 - val_accuracy: 0.5026
113 Epoch 12/20
step - loss: 1.2425 - accuracy: 0.4897 - val_loss: 1
  .2116 - val accuracy: 0.5064
115 Epoch 13/20
step - loss: 1.2456 - accuracy: 0.4897 - val_loss: 1
  .2177 - val_accuracy: 0.5102
117 Epoch 14/20
step - loss: 1.2385 - accuracy: 0.4913 - val_loss: 1
  .2194 - val_accuracy: 0.5077
119 Epoch 15/20
step - loss: 1.2317 - accuracy: 0.4996 - val_loss: 1
  .1959 - val_accuracy: 0.5173
121 Epoch 16/20
step - loss: 1.2229 - accuracy: 0.4998 - val_loss: 1
  .1949 - val_accuracy: 0.5154
123 Epoch 17/20
```

```
124 step - loss: 1.2122 - accuracy: 0.5042 - val_loss: 1
   .2115 - val_accuracy: 0.5160
125 Epoch 18/20
step - loss: 1.2107 - accuracy: 0.5124 - val_loss: 1
   .1910 - val_accuracy: 0.5160
127 Epoch 19/20
step - loss: 1.2021 - accuracy: 0.5148 - val_loss: 1
   .1944 - val_accuracy: 0.5179
129 Epoch 20/20
step - loss: 1.1968 - accuracy: 0.5134 - val_loss: 1
   .1971 - val_accuracy: 0.5179
131 2021-10-12 11:11:16.130924: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
132 1/27 [>.....] - ETA: 44s -
   loss: 0.9429 - accuracy: 0.62502021-10-12 11:11:17.
   119005: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
133 13/27 [=========>.....] - ETA: 9s -
   loss: 1.2116 - accuracy: 0.5433 2021-10-12 11:11:21.
   483880: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
134 2021-10-12 11:11:21.543290: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
135 2021-10-12 11:11:21.580378: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: profile 'ICC
   Profile': 'desc': ICC profile tag start not a
   multiple of 4
136 2021-10-12 11:11:21.580896: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: profile 'ICC
   Profile': 'wtpt': ICC profile tag start not a
   multiple of 4
137 2021-10-12 11:11:21.581284: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: profile 'ICC
   Profile': 'bkpt': ICC profile tag start not a
   multiple of 4
138 2021-10-12 11:11:21.581653: W tensorflow/core/lib/
```

- 138 png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'rXYZ': ICC profile tag start not a multiple of 4
- 139 2021-10-12 11:11:21.582027: W tensorflow/core/lib/png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'gXYZ': ICC profile tag start not a multiple of 4
- 140 2021-10-12 11:11:21.582419: W tensorflow/core/lib/png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'bXYZ': ICC profile tag start not a multiple of 4
- 141 2021-10-12 11:11:21.582796: W tensorflow/core/lib/png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'dmnd': ICC profile tag start not a multiple of 4
- 142 2021-10-12 11:11:21.583188: W tensorflow/core/lib/png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'dmdd': ICC profile tag start not a multiple of 4
- 143 2021-10-12 11:11:21.583573: W tensorflow/core/lib/png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'vued': ICC profile tag start not a multiple of 4
- 144 2021-10-12 11:11:21.583949: W tensorflow/core/lib/png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'view': ICC profile tag start not a multiple of 4
- 145 2021-10-12 11:11:21.584331: W tensorflow/core/lib/png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'lumi': ICC profile tag start not a multiple of 4
- 146 2021-10-12 11:11:21.584703: W tensorflow/core/lib/png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'meas': ICC profile tag start not a multiple of 4
- 147 2021-10-12 11:11:21.585088: W tensorflow/core/lib/png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'tech': ICC profile tag start not a multiple of 4
- 148 2021-10-12 11:11:21.603543: W tensorflow/core/lib/png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC

```
148 Profile': 'rTRC': ICC profile tag start not a
   multiple of 4
149 2021-10-12 11:11:21.603929: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: profile 'ICC
   Profile': 'qTRC': ICC profile tag start not a
   multiple of 4
150 2021-10-12 11:11:21.604301: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: profile 'ICC
   Profile': 'bTRC': ICC profile tag start not a
   multiple of 4
151 15/27 [=========>.....] - ETA: 8s -
   loss: 1.2251 - accuracy: 0.53962021-10-12 11:11:26.
   435707: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
step - loss: 1.2281 - accuracy: 0.5324
153 Accuracy: 0.5324074029922485
154 Loss: 1.22812819480896
155 end
156
157 Process finished with exit code 0
158
```