- 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 2021-10-20 08:15:47.975464: 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 2021-10-20 08:15:47.975929: 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 2021-10-20 08:16:06.966177: W tensorflow/ stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic library 'nvcuda.dll'; dlerror : nvcuda.dll not found
- 9 2021-10-20 08:16:06.966615: W tensorflow/ stream_executor/cuda/cuda_driver.cc:269] failed call to cuInit: UNKNOWN ERROR (303)
- 10 2021-10-20 08:16:06.985673: I tensorflow/ stream_executor/cuda/cuda_diagnostics.cc:169] retrieving CUDA diagnostic information for host: D26265VWTB0E
- 11 2021-10-20 08:16:06.986254: I tensorflow/ stream_executor/cuda/cuda_diagnostics.cc:176] hostname: D26265VWTBOE
- 12 2021-10-20 08:16:06.986845: 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 ______
39 flatten (Flatten) (None, 115200
40 _____
41 dense (Dense)

29491456
                         (None, 256
42 _____
43 dense_1 (Dense)
                         (None, 256
          65792
44 _____
45 dense_2 (Dense)
                         (None, 128
          32896
46
47 dense_3 (Dense)
) 774
                         (None, 6
                774
=========
49 Total params: 29,684,166
50 Trainable params: 29,684,166
51 Non-trainable params: 0
52 _____
53 Epoch 1/40
54 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 `
55
  from_logits=True`, but '
```

```
56 2021-10-20 08:16:09.766189: I tensorflow/compiler/
  mlir/mlir_graph_optimization_pass.cc:185] None of the
   MLIR Optimization Passes are enabled (registered 2)
    2/196 [.....] - ETA: 9:18
57
   - loss: 2.7740 - accuracy: 0.3281 2021-10-20 08:16:
  18.726765: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
    4/196 [.....] - ETA: 9:13
58
   - loss: 2.5749 - accuracy: 0.21882021-10-20 08:16:24
  .648418: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
59
    5/196 [.....] - ETA: 9:16
   - loss: 2.3459 - accuracy: 0.26882021-10-20 08:16:27
  .845589: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
60
   - loss: 1.7891 - accuracy: 0.33892021-10-20 08:16:48
  .113281: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
61 44/196 [====>.....] - ETA: 6:19
   - loss: 1.5176 - accuracy: 0.41052021-10-20 08:18:03
   .138201: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
62 45/196 [=====>.....] - ETA: 6:15
   - loss: 1.5162 - accuracy: 0.41042021-10-20 08:18:05
  .359478: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
63 54/196 [======>.....] - ETA: 5:51
   - loss: 1.4949 - accuracy: 0.41962021-10-20 08:18:27
  .147432: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
64
   57/196 [======>.....] - ETA: 5:43
   - loss: 1.4824 - accuracy: 0.42112021-10-20 08:18:34
  .478035: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
   58/196 [======>.....] - ETA: 5:41
65
   - loss: 1.4796 - accuracy: 0.42132021-10-20 08:18:36
  .784668: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
  63/196 [======>.....] - ETA: 5:26
66
   - loss: 1.4716 - accuracy: 0.42312021-10-20 08:18:48
```

```
66 .092376: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
67
   71/196 [=======>....] - ETA: 5:04
   - loss: 1.4629 - accuracy: 0.41952021-10-20 08:19:
  06.618859: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
   74/196 [=======>.....] - ETA: 4:56
   - loss: 1.4579 - accuracy: 0.42022021-10-20 08:19:
  13.525400: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
   80/196 [========>.....] - ETA: 4:40
   - loss: 1.4479 - accuracy: 0.42462021-10-20 08:19:
  27.166160: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
  85/196 [=========>.....] - ETA: 4:28
   - loss: 1.4417 - accuracy: 0.42392021-10-20 08:19:
  39.422829: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
71 90/196 [========>....] - ETA: 4:16
   - loss: 1.4409 - accuracy: 0.42262021-10-20 08:19:
  51.591673: W tensorflow/core/lib/png/png io.cc:881
  PNG warning: iCCP: known incorrect sRGB profile
72 94/196 [=========>.....] - ETA: 4:06
   - loss: 1.4385 - accuracy: 0.42292021-10-20 08:20:
  01.113306: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
73 107/196 [==========>.....] - ETA: 3:34
   - loss: 1.4243 - accuracy: 0.43522021-10-20 08:20:
  31.762114: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
74 116/196 [===========>.....] - ETA: 3:12
   - loss: 1.4231 - accuracy: 0.43562021-10-20 08:20:
  53.264304: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
75 118/196 [===========>....] - ETA: 3:08
   - loss: 1.4223 - accuracy: 0.43492021-10-20 08:20:
  57.953995: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
76 120/196 [===========>.....] - ETA: 3:03
   - loss: 1.4196 - accuracy: 0.43652021-10-20 08:21:
  02.994979: W tensorflow/core/lib/png/png_io.cc:88]
```

```
76 PNG warning: iCCP: known incorrect sRGB profile
77 2021-10-20 08:21:03.604722: W tensorflow/core/lib/
  pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
   sRGB profile
78 125/196 [============>....] - ETA: 2:51
   - loss: 1.4157 - accuracy: 0.43872021-10-20 08:21:
  15.043008: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
79 128/196 [===========>....] - ETA: 2:43
   - loss: 1.4141 - accuracy: 0.43992021-10-20 08:21:
  22.181170: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
80 129/196 [============>.....] - ETA: 2:41
   - loss: 1.4131 - accuracy: 0.44022021-10-20 08:21:
  24.699992: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
81 132/196 [============>....] - ETA: 2:34
   - loss: 1.4121 - accuracy: 0.44152021-10-20 08:21:
  32.498122: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
82 134/196 [==============>.....] - ETA: 2:29
   - loss: 1.4123 - accuracy: 0.44102021-10-20 08:21:
  36.877433: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
83 2021-10-20 08:21:36.878823: W tensorflow/core/lib/
  png/png_io.cc:88] PNG warning: iCCP: known incorrect
   sRGB profile
- loss: 1.4020 - accuracy: 0.44552021-10-20 08:22:
  21.480720: W tensorflow/core/lib/png/png io.cc:881
  PNG warning: iCCP: known incorrect sRGB profile
- loss: 1.4019 - accuracy: 0.44262021-10-20 08:22:
  48.105696: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
- loss: 1.3990 - accuracy: 0.44492021-10-20 08:23:
  01.760809: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
- loss: 1.3971 - accuracy: 0.4459 2021-10-20 08:23:
```

```
87 06.052235: W tensorflow/core/lib/png/png_io.cc:88]
   PNG warning: iCCP: known incorrect sRGB profile
88 196/196 [============ ] - ETA: Os
    - loss: 1.3894 - accuracy: 0.44552021-10-20 08:24:
   00.311689: W tensorflow/core/lib/png/png_io.cc:88]
   PNG warning: iCCP: known incorrect sRGB profile
89 2021-10-20 08:24:00.519269: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
90 2021-10-20 08:24:01.855163: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
91 2021-10-20 08:24:15.597879: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
92 2021-10-20 08:24:15.753955: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
93 2021-10-20 08:24:23.230011: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
94 196/196 [============= ] - 504s 3s/
   step - loss: 1.3894 - accuracy: 0.4455 - val_loss: 1
   .3050 - val_accuracy: 0.4795
95 Epoch 2/40
step - loss: 1.3411 - accuracy: 0.4527 - val_loss: 1
   .2861 - val_accuracy: 0.4795
97 Epoch 3/40
step - loss: 1.3262 - accuracy: 0.4518 - val_loss: 1
   .2937 - val accuracy: 0.4725
99 Epoch 4/40
step - loss: 1.3152 - accuracy: 0.4559 - val_loss: 1
   .3017 - val_accuracy: 0.4834
101 Epoch 5/40
step - loss: 1.2984 - accuracy: 0.4644 - val_loss: 1
   .2830 - val_accuracy: 0.4872
103 Epoch 6/40
```

```
step - loss: 1.2912 - accuracy: 0.4682 - val_loss: 1
  .2685 - val_accuracy: 0.4936
105 Epoch 7/40
step - loss: 1.2878 - accuracy: 0.4729 - val_loss: 1
  .2762 - val_accuracy: 0.5051
107 Epoch 8/40
step - loss: 1.2804 - accuracy: 0.4756 - val_loss: 1
  .2463 - val_accuracy: 0.5032
109 Epoch 9/40
step - loss: 1.2711 - accuracy: 0.4774 - val_loss: 1
  .2669 - val_accuracy: 0.4917
111 Epoch 10/40
step - loss: 1.2683 - accuracy: 0.4823 - val_loss: 1
  .2349 - val_accuracy: 0.5032
113 Epoch 11/40
step - loss: 1.2590 - accuracy: 0.4834 - val_loss: 1
  .2407 - val accuracy: 0.5013
115 Epoch 12/40
step - loss: 1.2558 - accuracy: 0.4913 - val_loss: 1
  .2331 - val_accuracy: 0.5115
117 Epoch 13/40
step - loss: 1.2519 - accuracy: 0.4967 - val_loss: 1
  .2267 - val_accuracy: 0.5038
119 Epoch 14/40
step - loss: 1.2440 - accuracy: 0.4929 - val_loss: 1
  .2180 - val_accuracy: 0.5141
121 Epoch 15/40
step - loss: 1.2356 - accuracy: 0.4972 - val_loss: 1
  .2294 - val_accuracy: 0.5045
123 Epoch 16/40
```

```
124 step - loss: 1.2280 - accuracy: 0.5036 - val_loss: 1
  .2300 - val_accuracy: 0.5173
125 Epoch 17/40
step - loss: 1.2246 - accuracy: 0.5054 - val_loss: 1
  .2140 - val_accuracy: 0.5237
127 Epoch 18/40
step - loss: 1.2122 - accuracy: 0.5113 - val_loss: 1
  .2143 - val_accuracy: 0.5141
129 Epoch 19/40
step - loss: 1.2160 - accuracy: 0.5105 - val_loss: 1
  .2376 - val_accuracy: 0.5064
131 Epoch 20/40
step - loss: 1.2065 - accuracy: 0.5161 - val_loss: 1
  .2324 - val_accuracy: 0.5173
133 Epoch 21/40
step - loss: 1.1992 - accuracy: 0.5198 - val_loss: 1
  .2319 - val_accuracy: 0.5115
135 Epoch 22/40
step - loss: 1.1983 - accuracy: 0.5158 - val_loss: 1
  .2232 - val_accuracy: 0.5256
137 Epoch 23/40
step - loss: 1.1948 - accuracy: 0.5113 - val_loss: 1
  .2020 - val_accuracy: 0.5211
139 Epoch 24/40
step - loss: 1.1864 - accuracy: 0.5202 - val_loss: 1
  .2019 - val_accuracy: 0.5198
141 Epoch 25/40
step - loss: 1.1874 - accuracy: 0.5188 - val_loss: 1
  .2209 - val_accuracy: 0.5352
143 Epoch 26/40
step - loss: 1.1734 - accuracy: 0.5273 - val_loss: 1
```

```
144 .2173 - val_accuracy: 0.5269
145 Epoch 27/40
step - loss: 1.1613 - accuracy: 0.5346 - val_loss: 1
   .2408 - val_accuracy: 0.5205
147 Epoch 28/40
148 196/196 [============= ] - 529s 3s/
   step - loss: 1.1660 - accuracy: 0.5287 - val_loss: 1
   .2424 - val_accuracy: 0.5147
149 Epoch 29/40
150 196/196 [============= ] - 483s 2s/
   step - loss: 1.1533 - accuracy: 0.5303 - val_loss: 1
   .2606 - val_accuracy: 0.4834
151 Epoch 30/40
152 196/196 [============= ] - 569s 3s/
   step - loss: 1.1539 - accuracy: 0.5361 - val_loss: 1
   .2350 - val_accuracy: 0.5128
153 Epoch 31/40
154 196/196 [============= ] - 580s 3s/
   step - loss: 1.1386 - accuracy: 0.5404 - val_loss: 1
   .2593 - val_accuracy: 0.5128
155 Epoch 32/40
step - loss: 1.1390 - accuracy: 0.5406 - val_loss: 1
   .2538 - val_accuracy: 0.5102
157 Epoch 33/40
158 196/196 [============= ] - 517s 3s/
   step - loss: 1.1349 - accuracy: 0.5407 - val_loss: 1
   .2928 - val_accuracy: 0.5083
159 Epoch 34/40
step - loss: 1.1260 - accuracy: 0.5390 - val_loss: 1
   .2416 - val_accuracy: 0.5128
161 Epoch 35/40
162 196/196 [============= ] - 539s 3s/
   step - loss: 1.1216 - accuracy: 0.5433 - val_loss: 1
   .2887 - val_accuracy: 0.5045
163 Epoch 36/40
step - loss: 1.1196 - accuracy: 0.5479 - val_loss: 1
   .3223 - val_accuracy: 0.5000
```

```
165 Epoch 37/40
step - loss: 1.0946 - accuracy: 0.5522 - val_loss: 1
   .3097 - val_accuracy: 0.4942
167 Epoch 38/40
168 196/196 [============= ] - 479s 2s/
   step - loss: 1.0959 - accuracy: 0.5623 - val_loss: 1
   .2593 - val_accuracy: 0.5122
169 Epoch 39/40
step - loss: 1.0923 - accuracy: 0.5586 - val_loss: 1
   .2875 - val_accuracy: 0.5083
171 Epoch 40/40
step - loss: 1.0853 - accuracy: 0.5585 - val_loss: 1
   .2608 - val_accuracy: 0.5173
173 2021-10-20 13:39:48.200516: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
   1/27 [>.....] - ETA: 46s -
174
   loss: 1.0186 - accuracy: 0.56252021-10-20 13:39:49.
   757869: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
175 7/27 [=====>.....] - ETA: 17s -
   loss: 1.3286 - accuracy: 0.53122021-10-20 13:39:54.
   621602: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
176 2021-10-20 13:39:54.721838: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
177 2021-10-20 13:39:54.767401: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: profile 'ICC
   Profile': 'desc': ICC profile tag start not a
   multiple of 4
178 2021-10-20 13:39:54.768026: 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
179 2021-10-20 13:39:54.768618: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: profile 'ICC
   Profile': 'bkpt': ICC profile tag start not a
```

- 179 multiple of 4
- 180 2021-10-20 13:39:54.769207: W tensorflow/core/lib/png/png_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'rXYZ': ICC profile tag start not a multiple of 4
- 181 2021-10-20 13:39:54.784070: 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
- 182 2021-10-20 13:39:54.784546: 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
- 183 2021-10-20 13:39:54.785038: 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
- 184 2021-10-20 13:39:54.785444: 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
- 185 2021-10-20 13:39:54.785830: 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
- 186 2021-10-20 13:39:54.786232: 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
- 187 2021-10-20 13:39:54.786769: 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
- 188 2021-10-20 13:39:54.787193: 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
- 189 2021-10-20 13:39:54.787588: 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

```
190 2021-10-20 13:39:54.787976: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: profile 'ICC
   Profile': 'rTRC': ICC profile tag start not a
   multiple of 4
191 2021-10-20 13:39:54.788359: 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
192 2021-10-20 13:39:54.788740: 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
193 14/27 [=========>.....] - ETA: 11s -
   loss: 1.3182 - accuracy: 0.51122021-10-20 13:40:00.
   567102: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
step - loss: 1.3260 - accuracy: 0.5289
195 Accuracy: 0.5289351940155029
196 Loss: 1.325972080230713
197 end
198
199 Process finished with exit code 0
200
```