- 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 11:32:36.092361: 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 11:32:36.092924: 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 11:32:49.958068: 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 11:32:49.958489: W tensorflow/ stream\_executor/cuda/cuda\_driver.cc:269] failed call to cuInit: UNKNOWN ERROR (303)
- 10 2021-10-12 11:32:49.976129: I tensorflow/ stream\_executor/cuda/cuda\_diagnostics.cc:169] retrieving CUDA diagnostic information for host: D26265VWTB0E
- 11 2021-10-12 11:32:49.976754: I tensorflow/ stream\_executor/cuda/cuda\_diagnostics.cc:176] hostname: D26265VWTB0E
- 12 2021-10-12 11:32:49.977281: 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"	
	Layer (type) Param #	Output Shape
	rescaling (Rescaling)	
22	) 0	
	random_flip (RandomFlip) ) 0	
25	random_rotation (RandomRotat ) 0	
	conv2d (Conv2D) ) 1792	(None, 254, 254, 64
29	max_pooling2d (MaxPooling2D) ) 0	
31	conv2d_1 (Conv2D) ) 73856	(None, 125, 125, 128
33		
		(None, 60, 60, 256
	0011V2U_2 (0011V2D)	(110110, 00, 00, 200

```
35 )
36 __
37 max_pooling2d_2 (MaxPooling2 (None, 30, 30, 256
38 _____
                    (None, 230400
39 flatten (Flatten)
40 _____
41 dense (Dense)
58982656
                          (None, 256
42 _____
43 dense_1 (Dense)
                          (None, 6
                 1542
=========
45 Total params: 59,355,014
46 Trainable params: 59,355,014
47 Non-trainable params: 0
48 _____
49 Epoch 1/20
50 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 `
51
  from_logits=True`, but '
52 2021-10-12 11:32:53.110569: I tensorflow/compiler/
  mlir/mlir_graph_optimization_pass.cc:185] None of the
   MLIR Optimization Passes are enabled (registered 2)
    2/196 [.....] - ETA: 16:35
53
   - loss: 15.2108 - accuracy: 0.28122021-10-12 11:33:
  04.073598: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
    4/196 [.....] - ETA: 15:42
54
```

```
- loss: 9.5380 - accuracy: 0.2031 2021-10-12 11:33:
  13.744093: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
    5/196 [..... - ETA: 15:10
55
   - loss: 7.9271 - accuracy: 0.21882021-10-12 11:33:18
  .125870: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
   13/196 [>.....] - ETA: 13:59
56
   - loss: 3.9549 - accuracy: 0.31732021-10-12 11:33:54
  .166470: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
   46/196 [=====>....] - ETA: 11:00
57
   - loss: 2.1107 - accuracy: 0.41102021-10-12 11:36:17
  .082172: W tensorflow/core/lib/png/png io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
  47/196 [=====>.....] - ETA: 10:55
58
   - loss: 2.0993 - accuracy: 0.41092021-10-12 11:36:21
  .381356: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
59
  56/196 [======>.....] - ETA: 10:15
   - loss: 1.9730 - accuracy: 0.42192021-10-12 11:37:00
  .901686: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
60 59/196 [=======>....] - ETA: 10:01
   - loss: 1.9419 - accuracy: 0.42112021-10-12 11:37:13
  .833129: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
61 60/196 [=======>.....] - ETA: 9:58
   - loss: 1.9336 - accuracy: 0.4224 2021-10-12 11:37:
  18.556131: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
62 65/196 [=======>....] - ETA: 9:42
   - loss: 1.8902 - accuracy: 0.41782021-10-12 11:37:43
  .663166: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
   73/196 [========>....] - ETA: 9:06
63
   - loss: 1.8317 - accuracy: 0.42042021-10-12 11:38:18
   .985311: W tensorflow/core/lib/png/png_io.cc:88] PNG
  warning: iCCP: known incorrect sRGB profile
  76/196 [=======>.....] - ETA: 8:52
64
   - loss: 1.8114 - accuracy: 0.42232021-10-12 11:38:31
```

```
64 .837699: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
   82/196 [========>....] - ETA: 8:25
   - loss: 1.7769 - accuracy: 0.42262021-10-12 11:38:
  57.836109: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
   87/196 [========>.....] - ETA: 8:05
   - loss: 1.7538 - accuracy: 0.42062021-10-12 11:39:
   22.459963: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
67 92/196 [=========>.....] - ETA: 7:43
   - loss: 1.7312 - accuracy: 0.42362021-10-12 11:39:
  45.015283: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
68 96/196 [=========>....] - ETA: 7:25
   - loss: 1.7162 - accuracy: 0.42512021-10-12 11:40:
  02.745270: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
69 109/196 [=========>.....] - ETA: 6:26
   - loss: 1.6728 - accuracy: 0.43492021-10-12 11:40:
   59.178418: W tensorflow/core/lib/png/png io.cc:881
  PNG warning: iCCP: known incorrect sRGB profile
70 118/196 [===========>.....] - ETA: 5:45
   - loss: 1.6510 - accuracy: 0.43432021-10-12 11:41:
  37.695867: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
71 120/196 [===========>....] - ETA: 5:36
   - loss: 1.6444 - accuracy: 0.43592021-10-12 11:41:
  46.168925: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
72 122/196 [===========>....] - ETA: 5:27
   - loss: 1.6395 - accuracy: 0.43652021-10-12 11:41:
   54.912937: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
73 2021-10-12 11:41:55.493184: W tensorflow/core/lib/
  png/png_io.cc:88] PNG warning: iCCP: known incorrect
   sRGB profile
74 127/196 [============>....] - ETA: 5:05
   - loss: 1.6251 - accuracy: 0.43902021-10-12 11:42:
   16.511346: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
```

```
75 130/196 [============>....] - ETA: 4:51
   - loss: 1.6239 - accuracy: 0.43872021-10-12 11:42:
  29.361074: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
76 131/196 [=============>....] - ETA: 4:47
   - loss: 1.6196 - accuracy: 0.44012021-10-12 11:42:
  33.998432: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
77 134/196 [============>....] - ETA: 4:34
   - loss: 1.6140 - accuracy: 0.44052021-10-12 11:42:
  47.420693: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
78 136/196 [=============>....] - ETA: 4:25
   - loss: 1.6094 - accuracy: 0.44072021-10-12 11:42:
  56.148531: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
79 2021-10-12 11:42:56.157448: W tensorflow/core/lib/
  pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
   sRGB profile
- loss: 1.5761 - accuracy: 0.44422021-10-12 11:44:
  21.312360: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
- loss: 1.5618 - accuracy: 0.44302021-10-12 11:45:
  10.629517: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
- loss: 1.5520 - accuracy: 0.44552021-10-12 11:45:
  37.811977: W tensorflow/core/lib/pnq/pnq_io.cc:881
  PNG warning: iCCP: known incorrect sRGB profile
- loss: 1.5482 - accuracy: 0.44592021-10-12 11:45:
  47.511635: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
- loss: 1.5258 - accuracy: 0.44522021-10-12 11:47:
  28.613575: W tensorflow/core/lib/png/png_io.cc:88]
  PNG warning: iCCP: known incorrect sRGB profile
85 2021-10-12 11:47:28.894853: W tensorflow/core/lib/
  png/png_io.cc:88] PNG warning: iCCP: known incorrect
```

```
85
    sRGB profile
86 2021-10-12 11:47:31.541009: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
87 2021-10-12 11:48:04.437613: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
88 2021-10-12 11:48:05.516508: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
89 2021-10-12 11:48:18.993735: W tensorflow/core/lib/
   png/png_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
90 196/196 [============= ] - 945s 5s/
   step - loss: 1.5258 - accuracy: 0.4452 - val_loss: 1
   .3077 - val_accuracy: 0.4795
91 Epoch 2/20
92 196/196 [============= ] - 979s 5s/
   step - loss: 1.3414 - accuracy: 0.4585 - val_loss: 1
   .2976 - val_accuracy: 0.4994
93 Epoch 3/20
94 196/196 [============== ] - 981s 5s/
   step - loss: 1.3232 - accuracy: 0.4692 - val_loss: 1
   .2803 - val_accuracy: 0.4904
95 Epoch 4/20
96 196/196 [============== ] - 994s 5s/
   step - loss: 1.3060 - accuracy: 0.4761 - val_loss: 1
   .2772 - val_accuracy: 0.5064
97 Epoch 5/20
98 196/196 [============= ] - 996s 5s/
   step - loss: 1.2988 - accuracy: 0.4740 - val_loss: 1
   .2791 - val_accuracy: 0.4987
99 Epoch 6/20
step - loss: 1.2944 - accuracy: 0.4826 - val_loss: 1
   .2803 - val_accuracy: 0.4994
101 Epoch 7/20
step - loss: 1.2906 - accuracy: 0.4798 - val_loss: 1
   .2883 - val_accuracy: 0.5045
103 Epoch 8/20
```

```
step - loss: 1.2850 - accuracy: 0.4804 - val_loss: 1
  .2684 - val_accuracy: 0.4987
105 Epoch 9/20
step - loss: 1.2830 - accuracy: 0.4825 - val_loss: 1
  .2752 - val_accuracy: 0.5019
107 Epoch 10/20
step - loss: 1.2849 - accuracy: 0.4798 - val_loss: 1
  .2901 - val_accuracy: 0.4981
109 Epoch 11/20
step - loss: 1.2810 - accuracy: 0.4788 - val_loss: 1
  .2917 - val_accuracy: 0.4923
111 Epoch 12/20
step - loss: 1.2782 - accuracy: 0.4826 - val_loss: 1
  .2558 - val_accuracy: 0.5051
113 Epoch 13/20
step - loss: 1.2682 - accuracy: 0.4850 - val_loss: 1
  .2533 - val accuracy: 0.4923
115 Epoch 14/20
116 196/196 [============= ] - 887s 5s/
  step - loss: 1.2654 - accuracy: 0.4822 - val_loss: 1
  .2520 - val_accuracy: 0.4878
117 Epoch 15/20
step - loss: 1.2684 - accuracy: 0.4796 - val_loss: 1
  .2375 - val_accuracy: 0.4987
119 Epoch 16/20
step - loss: 1.2561 - accuracy: 0.4894 - val_loss: 1
  .2600 - val_accuracy: 0.4968
121 Epoch 17/20
step - loss: 1.2537 - accuracy: 0.4863 - val_loss: 1
  .2329 - val_accuracy: 0.4974
123 Epoch 18/20
```

```
124 step - loss: 1.2516 - accuracy: 0.4906 - val_loss: 1
   .2277 - val_accuracy: 0.5000
125 Epoch 19/20
step - loss: 1.2457 - accuracy: 0.4892 - val_loss: 1
   .2236 - val_accuracy: 0.4987
127 Epoch 20/20
step - loss: 1.2363 - accuracy: 0.4948 - val_loss: 1
   .2422 - val_accuracy: 0.4949
129 2021-10-12 16:42:52.580806: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
130 2021-10-12 16:42:54.558440: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
131 8/27 [======>.....] - ETA: 25s -
   loss: 1.2261 - accuracy: 0.50392021-10-12 16:43:04.
   083756: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
132 2021-10-12 16:43:04.541047: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: known incorrect
    sRGB profile
133 2021-10-12 16:43:04.563742: 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
134 2021-10-12 16:43:04.564266: 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
135 2021-10-12 16:43:04.564649: 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
136 2021-10-12 16:43:04.565018: 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
137 2021-10-12 16:43:04.565387: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: profile 'ICC
```

- 137 Profile': 'gXYZ': ICC profile tag start not a multiple of 4
- 138 2021-10-12 16:43:04.565756: 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
- 139 2021-10-12 16:43:04.566176: 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
- 140 2021-10-12 16:43:04.566590: 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
- 141 2021-10-12 16:43:04.566973: 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
- 142 2021-10-12 16:43:04.567368: 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
- 143 2021-10-12 16:43:04.567738: 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
- 144 2021-10-12 16:43:04.568102: 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
- 145 2021-10-12 16:43:04.568468: 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
- 146 2021-10-12 16:43:04.568861: 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
- 147 2021-10-12 16:43:04.569261: W tensorflow/core/lib/png/png\_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'gTRC': ICC profile tag start not a

```
147 multiple of 4
148 2021-10-12 16:43:04.569736: W tensorflow/core/lib/
   pnq/pnq_io.cc:88] PNG warning: iCCP: profile 'ICC
   Profile': 'bTRC': ICC profile tag start not a
   multiple of 4
149 15/27 [=========>.....] - ETA: 15s -
   loss: 1.2835 - accuracy: 0.48542021-10-12 16:43:12.
   644539: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
- loss: 1.2940 - accuracy: 0.5035
151 Accuracy: 0.5034722089767456
152 Loss: 1.293987512588501
153 end
154
155 Process finished with exit code 0
156
```