

```
1 C:\Users\jdeag\Desktop\project\ArtificialIntel\BuildingIdentifier\venv\
Scripts\python.exe C:/Users/jdeag/Desktop/project/ArtificialIntel/
BuildingIdentifier/ImageAnnotation/KerasTunerDeagan.py
2 2021-10-06 11:31:23.117568: 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 2021-10-06 11:31:23.117828: 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.
4 THIS IS THE PROPER KERAS TUNER
  //////////////////////////////////////
  //////////////////////////////////////
  //////////////////////////////////////
5 2.6.0
6 Found 7811 files belonging to 6 classes.
7 Using 6249 files for training.
8 2021-10-06 11:31:35.221010: W tensorflow/stream_executor/platform/default
/dso_loader.cc:64] Could not load dynamic library 'cudart64_110.dll';
dlerror: cudart64_110.dll not found
9 2021-10-06 11:31:35.221949: W tensorflow/stream_executor/platform/default
/dso_loader.cc:64] Could not load dynamic library 'cublas64_11.dll';
dlerror: cublas64_11.dll not found
10 2021-10-06 11:31:35.222903: W tensorflow/stream_executor/platform/default
/dso_loader.cc:64] Could not load dynamic library 'cublasLt64_11.dll';
dlerror: cublasLt64_11.dll not found
11 2021-10-06 11:31:35.223807: W tensorflow/stream_executor/platform/default
/dso_loader.cc:64] Could not load dynamic library 'cufft64_10.dll';
dlerror: cufft64_10.dll not found
12 2021-10-06 11:31:35.224705: W tensorflow/stream_executor/platform/default
/dso_loader.cc:64] Could not load dynamic library 'curand64_10.dll';
dlerror: curand64_10.dll not found
13 2021-10-06 11:31:35.225608: W tensorflow/stream_executor/platform/default
/dso_loader.cc:64] Could not load dynamic library 'cusolver64_11.dll';
dlerror: cusolver64_11.dll not found
14 2021-10-06 11:31:35.226516: W tensorflow/stream_executor/platform/default
/dso_loader.cc:64] Could not load dynamic library 'cusparse64_11.dll';
dlerror: cusparse64_11.dll not found
15 2021-10-06 11:31:35.227418: W tensorflow/stream_executor/platform/default
/dso_loader.cc:64] Could not load dynamic library 'cudnn64_8.dll';
dlerror: cudnn64_8.dll not found
16 2021-10-06 11:31:35.227986: W tensorflow/core/common_runtime/gpu/
gpu_device.cc:1835] Cannot dlopen some GPU libraries. Please make sure
the missing libraries mentioned above are installed properly if you would
like to use GPU. Follow the guide at https://www.tensorflow.org/install/
gpu for how to download and setup the required libraries for your
platform.
17 Skipping registering GPU devices...
18 2021-10-06 11:31:35.229333: 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
19 To enable them in other operations, rebuild TensorFlow with the
appropriate compiler flags.
20 Found 7811 files belonging to 6 classes.
21 Using 1562 files for validation.
22 Found 864 files belonging to 6 classes.
23 Model: "sequential"
```

```
24 -----
25 Layer (type)                Output Shape                Param #
26 =====
27 rescaling (Rescaling)       (None, 256, 256, 3)        0
28 -----
29 random_flip (RandomFlip)    (None, 256, 256, 3)        0
30 -----
31 random_rotation (RandomRotat (None, 256, 256, 3)        0
32 -----
33 conv2d (Conv2D)              (None, 254, 254, 32)       896
34 -----
35 max_pooling2d (MaxPooling2D) (None, 127, 127, 32)       0
36 -----
37 conv2d_1 (Conv2D)            (None, 125, 125, 64)       18496
38 -----
39 max_pooling2d_1 (MaxPooling2 (None, 62, 62, 64)         0
40 -----
41 conv2d_2 (Conv2D)            (None, 60, 60, 128)        73856
42 -----
43 max_pooling2d_2 (MaxPooling2 (None, 30, 30, 128)        0
44 -----
45 flatten (Flatten)           (None, 115200)             0
46 -----
47 dense (Dense)                (None, 256)                29491456
48 -----
49 dense_1 (Dense)              (None, 128)                32896
50 -----
51 dense_2 (Dense)              (None, 128)                16512
52 -----
53 dense_3 (Dense)              (None, 6)                  774
54 =====
55 Total params: 29,634,886
56 Trainable params: 29,634,886
57 Non-trainable params: 0
58 -----
59 Epoch 1/20
60 C:\Users\jideag\Desktop\project\ArtificialIntel\BuildingIdentifier\venv\
lib\site-packages\keras\backend.py:4906: 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?"
61 warnings.warn(
62 2021-10-06 11:31:36.379949: I tensorflow/compiler/mlir/
mlir_graph_optimization_pass.cc:185] None of the MLIR Optimization Passes
are enabled (registered 2)
63 1/196 [.....] - ETA: 9:37 - loss: 1.7613 -
accuracy: 0.53122021-10-06 11:31:38.977010: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
64 4/196 [.....] - ETA: 5:21 - loss: 4.8444 -
accuracy: 0.49222021-10-06 11:31:43.972850: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
65 5/196 [.....] - ETA: 5:19 - loss: 4.1983 -
accuracy: 0.43752021-10-06 11:31:45.666280: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
66 13/196 [>.....] - ETA: 5:03 - loss: 2.5272 -
accuracy: 0.37742021-10-06 11:31:58.854526: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
```

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67 46/196 [=====>.....] - ETA: 4:10 - loss: 1.7118 -  
accuracy: 0.42462021-10-06 11:32:54.188043: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
68 2021-10-06 11:32:54.310917: W tensorflow/core/lib/png/png_io.cc:88] PNG  
warning: iCCP: known incorrect sRGB profile  
69 56/196 [=====>.....] - ETA: 3:54 - loss: 1.6477 -  
accuracy: 0.43302021-10-06 11:33:10.927059: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
70 58/196 [=====>.....] - ETA: 3:50 - loss: 1.6375 -  
accuracy: 0.43212021-10-06 11:33:14.498997: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
71 60/196 [=====>.....] - ETA: 3:47 - loss: 1.6321 -  
accuracy: 0.43282021-10-06 11:33:17.667564: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
72 65/196 [=====>.....] - ETA: 3:39 - loss: 1.6098 -  
accuracy: 0.43172021-10-06 11:33:26.115289: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
73 73/196 [=====>.....] - ETA: 3:26 - loss: 1.5842 -  
accuracy: 0.43022021-10-06 11:33:39.636790: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
74 76/196 [=====>.....] - ETA: 3:21 - loss: 1.5731 -  
accuracy: 0.43132021-10-06 11:33:44.839039: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
75 82/196 [=====>.....] - ETA: 3:11 - loss: 1.5575 -  
accuracy: 0.43102021-10-06 11:33:54.923055: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
76 87/196 [=====>.....] - ETA: 3:03 - loss: 1.5459 -  
accuracy: 0.42852021-10-06 11:34:03.403122: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
77 92/196 [=====>.....] - ETA: 2:54 - loss: 1.5349 -  
accuracy: 0.43042021-10-06 11:34:11.904697: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
78 96/196 [=====>.....] - ETA: 2:48 - loss: 1.5283 -  
accuracy: 0.43292021-10-06 11:34:18.625775: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
79 109/196 [=====>.....] - ETA: 2:26 - loss: 1.5082 -  
accuracy: 0.44182021-10-06 11:34:40.669523: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
80 117/196 [=====>.....] - ETA: 2:12 - loss: 1.4983 -  
accuracy: 0.44182021-10-06 11:34:54.193828: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
81 119/196 [=====>.....] - ETA: 2:09 - loss: 1.4975 -  
accuracy: 0.44072021-10-06 11:34:57.558581: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
82 122/196 [=====>.....] - ETA: 2:04 - loss: 1.4916 -  
accuracy: 0.44262021-10-06 11:35:02.598186: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
83 2021-10-06 11:35:02.673746: W tensorflow/core/lib/png/png_io.cc:88] PNG  
warning: iCCP: known incorrect sRGB profile  
84 127/196 [=====>.....] - ETA: 1:56 - loss: 1.4829 -  
accuracy: 0.44492021-10-06 11:35:11.396941: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
85 130/196 [=====>.....] - ETA: 1:51 - loss: 1.4860 -  
accuracy: 0.44452021-10-06 11:35:16.531370: W tensorflow/core/lib/png/  
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile  
86 131/196 [=====>.....] - ETA: 1:49 - loss: 1.4825 -  
accuracy: 0.44582021-10-06 11:35:18.240662: W tensorflow/core/lib/png/
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86 png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
87 134/196 [=====>.....] - ETA: 1:44 - loss: 1.4800 -
  accuracy: 0.44612021-10-06 11:35:23.592062: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
88 135/196 [=====>.....] - ETA: 1:43 - loss: 1.4785 -
  accuracy: 0.44632021-10-06 11:35:25.616010: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
89 2021-10-06 11:35:25.622109: W tensorflow/core/lib/png/png_io.cc:88] PNG
warning: iCCP: known incorrect sRGB profile
90 154/196 [=====>.....] - ETA: 1:11 - loss: 1.4605 -
  accuracy: 0.44992021-10-06 11:35:58.071792: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
91 166/196 [=====>.....] - ETA: 50s - loss: 1.4553 -
  accuracy: 0.44752021-10-06 11:36:18.107408: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
92 172/196 [=====>....] - ETA: 40s - loss: 1.4495 -
  accuracy: 0.44992021-10-06 11:36:28.421791: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
93 174/196 [=====>....] - ETA: 37s - loss: 1.4473 -
  accuracy: 0.45032021-10-06 11:36:31.497268: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
94 196/196 [=====] - ETA: 0s - loss: 1.4362 -
  accuracy: 0.44902021-10-06 11:37:18.809282: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
95 2021-10-06 11:37:19.089244: W tensorflow/core/lib/png/png_io.cc:88] PNG
warning: iCCP: known incorrect sRGB profile
96 2021-10-06 11:37:19.736860: W tensorflow/core/lib/png/png_io.cc:88] PNG
warning: iCCP: known incorrect sRGB profile
97 2021-10-06 11:37:28.422013: W tensorflow/core/lib/png/png_io.cc:88] PNG
warning: iCCP: known incorrect sRGB profile
98 2021-10-06 11:37:28.522070: W tensorflow/core/lib/png/png_io.cc:88] PNG
warning: iCCP: known incorrect sRGB profile
99 2021-10-06 11:37:32.839183: W tensorflow/core/lib/png/png_io.cc:88] PNG
warning: iCCP: known incorrect sRGB profile
100 196/196 [=====] - 362s 2s/step - loss: 1.4362
  - accuracy: 0.4490 - val_loss: 1.3055 - val_accuracy: 0.4795
101 Epoch 2/20
102 196/196 [=====] - 439s 2s/step - loss: 1.3397
  - accuracy: 0.4546 - val_loss: 1.2878 - val_accuracy: 0.4795
103 Epoch 3/20
104 196/196 [=====] - 458s 2s/step - loss: 1.3298
  - accuracy: 0.4564 - val_loss: 1.2710 - val_accuracy: 0.4917
105 Epoch 4/20
106 196/196 [=====] - 846s 4s/step - loss: 1.3128
  - accuracy: 0.4713 - val_loss: 1.2905 - val_accuracy: 0.5000
107 Epoch 5/20
108 196/196 [=====] - 520s 3s/step - loss: 1.2913
  - accuracy: 0.4802 - val_loss: 1.2779 - val_accuracy: 0.5102
109 Epoch 6/20
110 196/196 [=====] - 484s 2s/step - loss: 1.2835
  - accuracy: 0.4783 - val_loss: 1.2812 - val_accuracy: 0.4840
111 Epoch 7/20
112 196/196 [=====] - 487s 2s/step - loss: 1.2762
  - accuracy: 0.4814 - val_loss: 1.2679 - val_accuracy: 0.4994
113 Epoch 8/20
114 196/196 [=====] - 509s 3s/step - loss: 1.2636
  - accuracy: 0.4868 - val_loss: 1.2673 - val_accuracy: 0.5096
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115 Epoch 9/20
116 196/196 [=====] - 521s 3s/step - loss: 1.2539
    - accuracy: 0.4834 - val_loss: 1.2433 - val_accuracy: 0.5083
117 Epoch 10/20
118 196/196 [=====] - 518s 3s/step - loss: 1.2573
    - accuracy: 0.4911 - val_loss: 1.2375 - val_accuracy: 0.5192
119 Epoch 11/20
120 196/196 [=====] - 518s 3s/step - loss: 1.2450
    - accuracy: 0.4990 - val_loss: 1.2292 - val_accuracy: 0.5083
121 Epoch 12/20
122 196/196 [=====] - 541s 3s/step - loss: 1.2466
    - accuracy: 0.4948 - val_loss: 1.2228 - val_accuracy: 0.5243
123 Epoch 13/20
124 196/196 [=====] - 604s 3s/step - loss: 1.2433
    - accuracy: 0.4945 - val_loss: 1.2279 - val_accuracy: 0.5166
125 Epoch 14/20
126 196/196 [=====] - 551s 3s/step - loss: 1.2384
    - accuracy: 0.4985 - val_loss: 1.2123 - val_accuracy: 0.5166
127 Epoch 15/20
128 196/196 [=====] - 557s 3s/step - loss: 1.2326
    - accuracy: 0.4977 - val_loss: 1.2136 - val_accuracy: 0.5198
129 Epoch 16/20
130 196/196 [=====] - 566s 3s/step - loss: 1.2256
    - accuracy: 0.5065 - val_loss: 1.2197 - val_accuracy: 0.5186
131 Epoch 17/20
132 196/196 [=====] - 569s 3s/step - loss: 1.2244
    - accuracy: 0.5062 - val_loss: 1.2133 - val_accuracy: 0.5179
133 Epoch 18/20
134 196/196 [=====] - 586s 3s/step - loss: 1.2129
    - accuracy: 0.5108 - val_loss: 1.2113 - val_accuracy: 0.5256
135 Epoch 19/20
136 196/196 [=====] - 568s 3s/step - loss: 1.2082
    - accuracy: 0.5156 - val_loss: 1.2093 - val_accuracy: 0.5237
137 Epoch 20/20
138 196/196 [=====] - 542s 3s/step - loss: 1.2004
    - accuracy: 0.5153 - val_loss: 1.2158 - val_accuracy: 0.5096
139 2021-10-06 14:31:25.328220: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 19 of 256
140 2021-10-06 14:31:35.581630: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 76 of 256
141 2021-10-06 14:31:45.566901: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 149 of 256
142 2021-10-06 14:31:50.343928: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
143 2021-10-06 14:31:55.460814: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 221 of 256
144 2021-10-06 14:31:59.349923: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:228] Shuffle buffer filled.
145 3/27 [==>.....] - ETA: 1:49 - loss: 1.2268 -
    accuracy: 0.51042021-10-06 14:32:15.189344: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
146 10/27 [=====>.....] - ETA: 48s - loss: 1.2303 -
    accuracy: 0.51252021-10-06 14:32:28.567203: W tensorflow/core/lib/png/
```

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146 png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
147 2021-10-06 14:32:29.048193: W tensorflow/core/lib/png/png_io.cc:88] PNG
warning: iCCP: known incorrect sRGB profile
148 2021-10-06 14:32:29.384613: 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
149 2021-10-06 14:32:29.567737: 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
150 2021-10-06 14:32:29.568774: 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
151 2021-10-06 14:32:29.569793: 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
152 2021-10-06 14:32:29.570794: 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
153 2021-10-06 14:32:29.571801: 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
154 2021-10-06 14:32:29.572777: 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
155 2021-10-06 14:32:29.573799: 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
156 2021-10-06 14:32:29.574820: 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
157 2021-10-06 14:32:29.575805: 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
158 2021-10-06 14:32:29.576770: 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
159 2021-10-06 14:32:29.577717: 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
160 2021-10-06 14:32:29.578678: 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
161 2021-10-06 14:32:29.579658: 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
162 2021-10-06 14:32:29.580614: W tensorflow/core/lib/png/png_io.cc:88] PNG
warning: iCCP: profile 'ICC Profile': 'gTRC': ICC profile tag start not
a multiple of 4
163 2021-10-06 14:32:29.581398: 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
164 17/27 [=====>.....] - ETA: 30s - loss: 1.2531 -
accuracy: 0.52392021-10-06 14:32:53.051939: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
165 27/27 [=====] - 103s 2s/step - loss: 1.2555 -
accuracy: 0.5208
166 Accuracy: 0.5208333134651184
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167 Loss: 1.2555466890335083
168 end
169
170 Process finished with exit code 0
171
```