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1 D:\Programming\training\experiment3\rcnnmobilenet2\
  venv310\Scripts\python.exe D:\Programming\training\
  experiment3\rcnnmobilenet2\fine_tune_rcnn.py
2 [INFO] loading images...
3 After Load
4 [[1. 0. 0. 0. 0.]
5  [1. 0. 0. 0. 0.]
6  [1. 0. 0. 0. 0.]
7  ...
8  [0. 0. 0. 1. 0.]
9  [0. 0. 0. 1. 0.]
10 [0. 0. 0. 1. 0.]]
11 WARNING:tensorflow:`input_shape` is undefined or non-
  square, or `rows` is not in [96, 128, 160, 192, 224
  ]. Weights for input shape (224, 224) will be loaded
  as the default.
12 2023-05-17 14:49:49.267579: E tensorflow/
  stream_executor/cuda/cuda_driver.cc:265] failed call
  to cuInit: CUDA_ERROR_NO_DEVICE: no CUDA-capable
  device is detected
13 2023-05-17 14:49:49.306133: I tensorflow/
  stream_executor/cuda/cuda_diagnostics.cc:169]
  retrieving CUDA diagnostic information for host:
  DESKTOP-JLD5BM8
14 2023-05-17 14:49:49.306359: I tensorflow/
  stream_executor/cuda/cuda_diagnostics.cc:176]
  hostname: DESKTOP-JLD5BM8
15 2023-05-17 14:49:49.409322: I tensorflow/core/
  platform/cpu_feature_guard.cc:193] This TensorFlow
  binary is optimized with oneAPI Deep Neural Network
  Library (oneDNN) to use the following CPU
  instructions in performance-critical operations:  AVX
  AVX2
16 To enable them in other operations, rebuild
  TensorFlow with the appropriate compiler flags.
17 [INFO] Running Without Pruning...
18 [INFO] compiling model...
19 [INFO] training head...
20 Model: "model"
21 -----
  -----

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22	Layer (type)	Output Shape
	Param # Connected to	
23	=====	
24	input_1 (InputLayer)	[(None, 224, 224, 3
25	0 []	)]
26		
27	Conv1 (Conv2D)	(None, 112, 112, 32
28	864 ['input_1[0][0]']	)
29		
30	bn_Conv1 (BatchNormalization)	(None, 112, 112, 32
31	128 ['Conv1[0][0]']	)
32		
33	Conv1_relu (ReLU)	(None, 112, 112, 32
34	0 ['bn_Conv1[0][0]']	)
35		
36	expanded_conv_depthwise (Depth	(None, 112, 112, 32
37	288 ['Conv1_relu[0][0]']	
38	wiseConv2D	)
39	expanded_conv_depthwise_BN (Ba	(None, 112, 112, 32
40	128 ['expanded_conv_depthwise[0][0]']	
41	tchNormalization	)

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41
42 expanded_conv_depthwise_relu ( (None, 112, 112, 32
    0      ['expanded_conv_depthwise_BN[0][0]
43 ReLU
    )
    ])
44
45 expanded_conv_project (Conv2D) (None, 112, 112, 16
    512      ['expanded_conv_depthwise_relu[0]
46
    ])
    ['0']']
47
48 expanded_conv_project_BN (BatchNormal (None, 112, 112, 16
    64      ['expanded_conv_project[0][0]'])
49 ization
    )
50
51 block_1_expand (Conv2D) (None, 112, 112, 96
    1536      ['expanded_conv_project_BN[0][0]']
52
    )
    ]
53
54 block_1_expand_BN (BatchNormal (None, 112, 112, 96
    384      ['block_1_expand[0][0]'])
55 ization
    )
56
57 block_1_expand_relu (ReLU) (None, 112, 112, 96
    0      ['block_1_expand_BN[0][0]']
58
    )
59
60 block_1_pad (ZeroPadding2D) (None, 113, 113, 96

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60 0          ['block_1_expand_relu[0][0]']
61          )

62

63 block_1_depthwise (DepthwiseCo (None, 56, 56, 96
   ) 864          ['block_1_pad[0][0]']
64 nv2D
   )

65

66 block_1_depthwise_BN (BatchNor (None, 56, 56, 96
   ) 384          ['block_1_depthwise[0][0]']
67 malization
   )

68

69 block_1_depthwise_relu (ReLU) (None, 56, 56, 96
   ) 0          ['block_1_depthwise_BN[0][0]']
70

71 block_1_project (Conv2D) (None, 56, 56, 24
   ) 2304          ['block_1_depthwise_relu[0][0]']
72

73 block_1_project_BN (BatchNorma (None, 56, 56, 24
   ) 96          ['block_1_project[0][0]']
74 lization
   )

75

76 block_2_expand (Conv2D) (None, 56, 56, 144
   ) 3456          ['block_1_project_BN[0][0]']
77

78 block_2_expand_BN (BatchNormal (None, 56, 56, 144
   ) 576          ['block_2_expand[0][0]']
79 ization

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    )

80

81  block_2_expand_relu (ReLU)      (None, 56, 56, 144
    ) 0      ['block_2_expand_BN[0][0]']
82

83  block_2_depthwise (DepthwiseCo (None, 56, 56, 144
    ) 1296    ['block_2_expand_relu[0][0]']
84  nv2D
    )

85

86  block_2_depthwise_BN (BatchNor (None, 56, 56, 144
    ) 576     ['block_2_depthwise[0][0]']
87  malization
    )

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89  block_2_depthwise_relu (ReLU) (None, 56, 56, 144
    ) 0      ['block_2_depthwise_BN[0][0]']
90

91  block_2_project (Conv2D)      (None, 56, 56, 24
    ) 3456    ['block_2_depthwise_relu[0][0]']
92

93  block_2_project_BN (BatchNorma (None, 56, 56, 24
    ) 96      ['block_2_project[0][0]']
94  lization
    )

95

96  block_2_add (Add)              (None, 56, 56, 24
    ) 0      ['block_1_project_BN[0][0]',
97

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97         'block_2_project_BN[0][0]']
98
99     block_3_expand (Conv2D)          (None, 56, 56, 144
100 ) 3456          ['block_2_add[0][0]']
101
102     block_3_expand_BN (BatchNormal (None, 56, 56, 144
103 ) 576          ['block_3_expand[0][0]']
104 ization
105 )
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107
108     block_3_expand_relu (ReLU)      (None, 56, 56, 144
109 ) 0          ['block_3_expand_BN[0][0]']
110
111
112     block_3_pad (ZeroPadding2D)     (None, 57, 57, 144
113 ) 0          ['block_3_expand_relu[0][0]']
114
115
116     block_3_depthwise (DepthwiseCo (None, 28, 28, 144
117 ) 1296        ['block_3_pad[0][0]']
118 nv2D
119 )
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121
122     block_3_depthwise_BN (BatchNor (None, 28, 28, 144
123 ) 576          ['block_3_depthwise[0][0]']
124 malization
125 )
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135
136     block_3_depthwise_relu (ReLU)   (None, 28, 28, 144
137 ) 0          ['block_3_depthwise_BN[0][0]']
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116 )    4608    ['block_3_depthwise_relu[0][0]']
117
118 block_3_project_BN (BatchNorma (None, 28, 28, 32
    )    128    ['block_3_project[0][0]']
119 lization
    )
120
121 block_4_expand (Conv2D)    (None, 28, 28, 192
    )    6144    ['block_3_project_BN[0][0]']
122
123 block_4_expand_BN (BatchNormal (None, 28, 28, 192
    )    768    ['block_4_expand[0][0]']
124 ization
    )
125
126 block_4_expand_relu (ReLU)    (None, 28, 28, 192
    )    0    ['block_4_expand_BN[0][0]']
127
128 block_4_depthwise (DepthwiseCo (None, 28, 28, 192
    )    1728    ['block_4_expand_relu[0][0]']
129 nv2D
    )
130
131 block_4_depthwise_BN (BatchNor (None, 28, 28, 192
    )    768    ['block_4_depthwise[0][0]']
132 malization
    )
133
134 block_4_depthwise_relu (ReLU) (None, 28, 28, 192
    )    0    ['block_4_depthwise_BN[0][0]']

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135
136  block_4_project (Conv2D)          (None, 28, 28, 32
    ) 6144          ['block_4_depthwise_relu[0][0]']
137
138  block_4_project_BN (BatchNormal (None, 28, 28, 32
    ) 128          ['block_4_project[0][0]']
139  lization
    )
140
141  block_4_add (Add)                  (None, 28, 28, 32
    ) 0            ['block_3_project_BN[0][0]',
142
    'block_4_project_BN[0][0]']
143
144  block_5_expand (Conv2D)            (None, 28, 28, 192
    ) 6144          ['block_4_add[0][0]']
145
146  block_5_expand_BN (BatchNormal (None, 28, 28, 192
    ) 768          ['block_5_expand[0][0]']
147  ization
    )
148
149  block_5_expand_relu (ReLU)         (None, 28, 28, 192
    ) 0            ['block_5_expand_BN[0][0]']
150
151  block_5_depthwise (DepthwiseCo (None, 28, 28, 192
    ) 1728          ['block_5_expand_relu[0][0]']
152  nv2D
    )
153

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154 block_5_depthwise_BN (BatchNor (None, 28, 28, 192
    ) 768 ['block_5_depthwise[0][0]']
155 malization
    )

156

157 block_5_depthwise_relu (ReLU) (None, 28, 28, 192
    ) 0 ['block_5_depthwise_BN[0][0]']
158

159 block_5_project (Conv2D) (None, 28, 28, 32
    ) 6144 ['block_5_depthwise_relu[0][0]']
160

161 block_5_project_BN (BatchNorma (None, 28, 28, 32
    ) 128 ['block_5_project[0][0]']
162 lization
    )

163

164 block_5_add (Add) (None, 28, 28, 32
    ) 0 ['block_4_add[0][0]',
165
    'block_5_project_BN[0][0]']
166

167 block_6_expand (Conv2D) (None, 28, 28, 192
    ) 6144 ['block_5_add[0][0]']
168

169 block_6_expand_BN (BatchNormal (None, 28, 28, 192
    ) 768 ['block_6_expand[0][0]']
170 ization
    )

171

172 block_6_expand_relu (ReLU) (None, 28, 28, 192
    ) 0 ['block_6_expand_BN[0][0]']

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173

174  block_6_pad (ZeroPadding2D)      (None, 29, 29, 192
    )  0                          ['block_6_expand_relu[0][0]']
175

176  block_6_depthwise (DepthwiseCo  (None, 14, 14, 192
    )  1728                        ['block_6_pad[0][0]']
177  nv2D
    )

178

179  block_6_depthwise_BN (BatchNor  (None, 14, 14, 192
    )  768                        ['block_6_depthwise[0][0]']
180  malization
    )

181

182  block_6_depthwise_relu (ReLU)  (None, 14, 14, 192
    )  0                          ['block_6_depthwise_BN[0][0]']
183

184  block_6_project (Conv2D)          (None, 14, 14, 64
    )  12288                      ['block_6_depthwise_relu[0][0]']
185

186  block_6_project_BN (BatchNorma  (None, 14, 14, 64
    )  256                        ['block_6_project[0][0]']
187  lization
    )

188

189  block_7_expand (Conv2D)           (None, 14, 14, 384
    )  24576                      ['block_6_project_BN[0][0]']
190

191  block_7_expand_BN (BatchNormal  (None, 14, 14, 384
    )  1536                      ['block_7_expand[0][0]']

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192   ization
      )

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194   block_7_expand_relu (ReLU)      (None, 14, 14, 384
      ) 0      ['block_7_expand_BN[0][0]']
195

196   block_7_depthwise (DepthwiseCo (None, 14, 14, 384
      ) 3456      ['block_7_expand_relu[0][0]']
197   nv2D
      )

198

199   block_7_depthwise_BN (BatchNor (None, 14, 14, 384
      ) 1536      ['block_7_depthwise[0][0]']
200   malization
      )

201

202   block_7_depthwise_relu (ReLU) (None, 14, 14, 384
      ) 0      ['block_7_depthwise_BN[0][0]']
203

204   block_7_project (Conv2D)      (None, 14, 14, 64
      ) 24576      ['block_7_depthwise_relu[0][0]']
205

206   block_7_project_BN (BatchNorma (None, 14, 14, 64
      ) 256      ['block_7_project[0][0]']
207   lization
      )

208

209   block_7_add (Add)      (None, 14, 14, 64
      ) 0      ['block_6_project_BN[0][0]',
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210             'block_7_project_BN[0][0]']
211
212     block_8_expand (Conv2D)          (None, 14, 14, 384
    ) 24576      ['block_7_add[0][0]']
213
214     block_8_expand_BN (BatchNormal (None, 14, 14, 384
    ) 1536      ['block_8_expand[0][0]']
215     ization
    )
216
217     block_8_expand_relu (ReLU)      (None, 14, 14, 384
    ) 0          ['block_8_expand_BN[0][0]']
218
219     block_8_depthwise (DepthwiseCo (None, 14, 14, 384
    ) 3456      ['block_8_expand_relu[0][0]']
220     nv2D
    )
221
222     block_8_depthwise_BN (BatchNor (None, 14, 14, 384
    ) 1536      ['block_8_depthwise[0][0]']
223     malization
    )
224
225     block_8_depthwise_relu (ReLU)  (None, 14, 14, 384
    ) 0          ['block_8_depthwise_BN[0][0]']
226
227     block_8_project (Conv2D)        (None, 14, 14, 64
    ) 24576      ['block_8_depthwise_relu[0][0]']
228
229     block_8_project_BN (BatchNorma (None, 14, 14, 64

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229 ) 256 ['block_8_project[0][0]']
230 lization
    )

231

232 block_8_add (Add) (None, 14, 14, 64
    ) 0 ['block_7_add[0][0]',
233
        'block_8_project_BN[0][0]']
234

235 block_9_expand (Conv2D) (None, 14, 14, 384
    ) 24576 ['block_8_add[0][0]']
236

237 block_9_expand_BN (BatchNormal (None, 14, 14, 384
    ) 1536 ['block_9_expand[0][0]']
238 ization
    )

239

240 block_9_expand_relu (ReLU) (None, 14, 14, 384
    ) 0 ['block_9_expand_BN[0][0]']
241

242 block_9_depthwise (DepthwiseCo (None, 14, 14, 384
    ) 3456 ['block_9_expand_relu[0][0]']
243 nv2D
    )

244

245 block_9_depthwise_BN (BatchNor (None, 14, 14, 384
    ) 1536 ['block_9_depthwise[0][0]']
246 malization
    )

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248 block_9_depthwise_relu (ReLU) (None, 14, 14, 384
    ) 0 ['block_9_depthwise_BN[0][0]']
249

250 block_9_project (Conv2D) (None, 14, 14, 64
    ) 24576 ['block_9_depthwise_relu[0][0]']
251

252 block_9_project_BN (BatchNorma (None, 14, 14, 64
    ) 256 ['block_9_project[0][0]']
253 lization
    )
254

255 block_9_add (Add) (None, 14, 14, 64
    ) 0 ['block_8_add[0][0]',
256
    'block_9_project_BN[0][0]']
257

258 block_10_expand (Conv2D) (None, 14, 14, 384
    ) 24576 ['block_9_add[0][0]']
259

260 block_10_expand_BN (BatchNorma (None, 14, 14, 384
    ) 1536 ['block_10_expand[0][0]']
261 lization
    )
262

263 block_10_expand_relu (ReLU) (None, 14, 14, 384
    ) 0 ['block_10_expand_BN[0][0]']
264

265 block_10_depthwise (DepthwiseC (None, 14, 14, 384
    ) 3456 ['block_10_expand_relu[0][0]']
266 onv2D
    )

```

```

267

268  block_10_depthwise_BN (BatchNo (None, 14, 14, 384
    ) 1536      ['block_10_depthwise[0][0]']
269  rmalization
    )

270

271  block_10_depthwise_relu (ReLU) (None, 14, 14, 384
    ) 0      ['block_10_depthwise_BN[0][0]']
272

273  block_10_project (Conv2D) (None, 14, 14, 96
    ) 36864      ['block_10_depthwise_relu[0][0]']
274

275  block_10_project_BN (BatchNorm (None, 14, 14, 96
    ) 384      ['block_10_project[0][0]']
276  alization
    )

277

278  block_11_expand (Conv2D) (None, 14, 14, 576
    ) 55296      ['block_10_project_BN[0][0]']
279

280  block_11_expand_BN (BatchNorma (None, 14, 14, 576
    ) 2304      ['block_11_expand[0][0]']
281  lization
    )

282

283  block_11_expand_relu (ReLU) (None, 14, 14, 576
    ) 0      ['block_11_expand_BN[0][0]']
284

285  block_11_depthwise (DepthwiseC (None, 14, 14, 576
    ) 5184      ['block_11_expand_relu[0][0]']

```

```

286  onv2D
    )

287

288  block_11_depthwise_BN (BatchNo (None, 14, 14, 576
    ) 2304      ['block_11_depthwise[0][0]']
289  rmalization
    )

290

291  block_11_depthwise_relu (ReLU) (None, 14, 14, 576
    ) 0      ['block_11_depthwise_BN[0][0]']
292

293  block_11_project (Conv2D) (None, 14, 14, 96
    ) 55296      ['block_11_depthwise_relu[0][0]']
294

295  block_11_project_BN (BatchNorm (None, 14, 14, 96
    ) 384      ['block_11_project[0][0]']
296  alization
    )

297

298  block_11_add (Add) (None, 14, 14, 96
    ) 0      ['block_10_project_BN[0][0]',
299
    'block_11_project_BN[0][0]']
300

301  block_12_expand (Conv2D) (None, 14, 14, 576
    ) 55296      ['block_11_add[0][0]']
302

303  block_12_expand_BN (BatchNorma (None, 14, 14, 576
    ) 2304      ['block_12_expand[0][0]']
304  lization
    )

```



```

304
305
306  block_12_expand_relu (ReLU)      (None, 14, 14, 576
    )  0                          ['block_12_expand_BN[0][0]']
307
308  block_12_depthwise (DepthwiseC  (None, 14, 14, 576
    )  5184                        ['block_12_expand_relu[0][0]']
309  onv2D
    )
310
311  block_12_depthwise_BN (BatchNo  (None, 14, 14, 576
    )  2304                        ['block_12_depthwise[0][0]']
312  rmalization
    )
313
314  block_12_depthwise_relu (ReLU)  (None, 14, 14, 576
    )  0                          ['block_12_depthwise_BN[0][0]']
315
316  block_12_project (Conv2D)        (None, 14, 14, 96
    )  55296                       ['block_12_depthwise_relu[0][0]']
317
318  block_12_project_BN (BatchNorm  (None, 14, 14, 96
    )  384                         ['block_12_project[0][0]']
319  alization
    )
320
321  block_12_add (Add)                (None, 14, 14, 96
    )  0                          ['block_11_add[0][0]',
322                                'block_12_project_BN[0][0]']
323

```

```

323
324  block_13_expand (Conv2D)      (None, 14, 14, 576
    ) 55296      ['block_12_add[0][0]']
325
326  block_13_expand_BN (BatchNorma (None, 14, 14, 576
    ) 2304      ['block_13_expand[0][0]']
327  lization
    )
328
329  block_13_expand_relu (ReLU)    (None, 14, 14, 576
    ) 0          ['block_13_expand_BN[0][0]']
330
331  block_13_pad (ZeroPadding2D)   (None, 15, 15, 576
    ) 0          ['block_13_expand_relu[0][0]']
332
333  block_13_depthwise (DepthwiseC (None, 7, 7, 576
    ) 5184      ['block_13_pad[0][0]']
334  onv2D
    )
335
336  block_13_depthwise_BN (BatchNo (None, 7, 7, 576
    ) 2304      ['block_13_depthwise[0][0]']
337  rmalization
    )
338
339  block_13_depthwise_relu (ReLU) (None, 7, 7, 576
    ) 0          ['block_13_depthwise_BN[0][0]']
340
341  block_13_project (Conv2D)      (None, 7, 7, 160
    ) 92160      ['block_13_depthwise_relu[0][0]']
342

```

```

342
343  block_13_project_BN (BatchNorm (None, 7, 7, 160
    ) 640 ['block_13_project[0][0]']
344  alization
    )

345

346  block_14_expand (Conv2D) (None, 7, 7, 960
    ) 153600 ['block_13_project_BN[0][0]']
347

348  block_14_expand_BN (BatchNorm (None, 7, 7, 960
    ) 3840 ['block_14_expand[0][0]']
349  lization
    )

350

351  block_14_expand_relu (ReLU) (None, 7, 7, 960
    ) 0 ['block_14_expand_BN[0][0]']
352

353  block_14_depthwise (DepthwiseC (None, 7, 7, 960
    ) 8640 ['block_14_expand_relu[0][0]']
354  onv2D
    )

355

356  block_14_depthwise_BN (BatchNo (None, 7, 7, 960
    ) 3840 ['block_14_depthwise[0][0]']
357  rmalization
    )

358

359  block_14_depthwise_relu (ReLU) (None, 7, 7, 960
    ) 0 ['block_14_depthwise_BN[0][0]']
360

```

```

361 block_14_project (Conv2D)      (None, 7, 7, 160
   )      153600      ['block_14_depthwise_relu[0][0]']
362

363 block_14_project_BN (BatchNorm (None, 7, 7, 160
   )      640      ['block_14_project[0][0]']
364 alization
   )

365

366 block_14_add (Add)              (None, 7, 7, 160
   )      0      ['block_13_project_BN[0][0]',
367
   'block_14_project_BN[0][0]']
368

369 block_15_expand (Conv2D)        (None, 7, 7, 960
   )      153600      ['block_14_add[0][0]']
370

371 block_15_expand_BN (BatchNorma (None, 7, 7, 960
   )      3840      ['block_15_expand[0][0]']
372 lization
   )

373

374 block_15_expand_relu (ReLU)     (None, 7, 7, 960
   )      0      ['block_15_expand_BN[0][0]']
375

376 block_15_depthwise (DepthwiseC (None, 7, 7, 960
   )      8640      ['block_15_expand_relu[0][0]']
377 onv2D
   )

378

379 block_15_depthwise_BN (BatchNo (None, 7, 7, 960
   )      3840      ['block_15_depthwise[0][0]']

```

```

380     rmalization
381     )

382     block_15_depthwise_relu (ReLU) (None, 7, 7, 960
383     )    0          ['block_15_depthwise_BN[0][0]']

384     block_15_project (Conv2D) (None, 7, 7, 160
385     )    153600      ['block_15_depthwise_relu[0][0]']

386     block_15_project_BN (BatchNorm (None, 7, 7, 160
387     )    640          ['block_15_project[0][0]']
388     rmalization
389     )

389     block_15_add (Add) (None, 7, 7, 160
390     )    0          ['block_14_add[0][0]',
391     'block_15_project_BN[0][0]']

392     block_16_expand (Conv2D) (None, 7, 7, 960
393     )    153600      ['block_15_add[0][0]']

394     block_16_expand_BN (BatchNorma (None, 7, 7, 960
395     )    3840          ['block_16_expand[0][0]']
396     lization
397     )

397     block_16_expand_relu (ReLU) (None, 7, 7, 960
398     )    0          ['block_16_expand_BN[0][0]']

```

```

399 block_16_depthwise (DepthwiseC (None, 7, 7, 960
   ) 8640 ['block_16_expand_relu[0][0]']
400 onv2D
   )

401

402 block_16_depthwise_BN (BatchNo (None, 7, 7, 960
   ) 3840 ['block_16_depthwise[0][0]']
403 rmalization
   )

404

405 block_16_depthwise_relu (ReLU) (None, 7, 7, 960
   ) 0 ['block_16_depthwise_BN[0][0]']
406

407 block_16_project (Conv2D) (None, 7, 7, 320
   ) 307200 ['block_16_depthwise_relu[0][0]']
408

409 block_16_project_BN (BatchNorm (None, 7, 7, 320
   ) 1280 ['block_16_project[0][0]']
410 alization
   )

411

412 Conv_1 (Conv2D) (None, 7, 7, 1280
   ) 409600 ['block_16_project_BN[0][0]']
413

414 Conv_1_bn (BatchNormalization) (None, 7, 7, 1280
   ) 5120 ['Conv_1[0][0]']
415

416 out_relu (ReLU) (None, 7, 7, 1280
   ) 0 ['Conv_1_bn[0][0]']
417

```

```

418 average_pooling2d (AveragePool (None, 1, 1, 1280
    ) 0 ['out_relu[0][0]']
419 ing2D
    )

420

421 flatten (Flatten) (None, 1280
    ) 0 ['average_pooling2d[0][0]']
422

423 dense (Dense) (None, 128
    ) 163968 ['flatten[0][0]']
424

425 dropout (Dropout) (None, 128
    ) 0 ['dense[0][0]']
426

427 dense_1 (Dense) (None, 5
    ) 645 ['dropout[0][0]']
428

429 =====
    =====
430 Total params: 2,422,597
431 Trainable params: 164,613
432 Non-trainable params: 2,257,984
433 -----
    -----
434 None
435 Epoch 1/5
436 2023-05-17 14:50:04.598779: W tensorflow/core/
    framework/cpu_allocator_impl.cc:82] Allocation of
    411041792 exceeds 10% of free system memory.
437 2023-05-17 14:50:05.121518: W tensorflow/core/
    framework/cpu_allocator_impl.cc:82] Allocation of

```

```

437 411041792 exceeds 10% of free system memory.
438 2023-05-17 14:50:05.317978: W tensorflow/core/
    framework/cpu_allocator_impl.cc:82] Allocation of
    411041792 exceeds 10% of free system memory.
439 2023-05-17 14:50:05.604411: W tensorflow/core/
    framework/cpu_allocator_impl.cc:82] Allocation of
    205520896 exceeds 10% of free system memory.
440 2023-05-17 14:50:05.717764: W tensorflow/core/
    framework/cpu_allocator_impl.cc:82] Allocation of
    1233125376 exceeds 10% of free system memory.
441 25/25 [=====] - 163s 6s/
    step - loss: 1.7743 - accuracy: 0.2796 - val_loss: 1
    .3011 - val_accuracy: 0.4363 - lr: 1.0000e-05
442 Epoch 2/5
443 25/25 [=====] - 145s 6s/
    step - loss: 1.5080 - accuracy: 0.3951 - val_loss: 1
    .1308 - val_accuracy: 0.5692 - lr: 1.0000e-05
444 Epoch 3/5
445 25/25 [=====] - 143s 6s/
    step - loss: 1.3531 - accuracy: 0.4664 - val_loss: 1
    .0205 - val_accuracy: 0.6492 - lr: 1.0000e-05
446 Epoch 4/5
447 25/25 [=====] - 148s 6s/
    step - loss: 1.2419 - accuracy: 0.5231 - val_loss: 0
    .9397 - val_accuracy: 0.6948 - lr: 1.0000e-05
448 Epoch 5/5
449 25/25 [=====] - 141s 6s/
    step - loss: 1.1430 - accuracy: 0.5646 - val_loss: 0
    .8752 - val_accuracy: 0.7280 - lr: 1.0000e-05
450 [INFO] evaluating network...
451 7/7 [=====] - 27s 4s/step
452 D:\Programming\training\experiment3\rcnnmobilenet2\
    venv310\lib\site-packages\sklearn\metrics\
    _classification.py:1344: UndefinedMetricWarning:
    Precision and F-score are ill-defined and being set
    to 0.0 in labels with no predicted samples. Use `
    zero_division` parameter to control this behavior.
453     _warn_prf(average, modifier, msg_start, len(result
    ))
454 D:\Programming\training\experiment3\rcnnmobilenet2\
    venv310\lib\site-packages\sklearn\metrics\

```



```

454 _classification.py:1344: UndefinedMetricWarning:
    Precision and F-score are ill-defined and being set
    to 0.0 in labels with no predicted samples. Use `
    zero_division` parameter to control this behavior.
455     _warn_prf(average, modifier, msg_start, len(result
    ))
456 D:\Programming\training\experiment3\rcnnmobilenet2\
    venv310\lib\site-packages\sklearn\metrics\
    _classification.py:1344: UndefinedMetricWarning:
    Precision and F-score are ill-defined and being set
    to 0.0 in labels with no predicted samples. Use `
    zero_division` parameter to control this behavior.
457     _warn_prf(average, modifier, msg_start, len(result
    ))
458             precision    recall  f1-score
support
459
460             00          0.00          0.00          0.00
10
461             L00          0.00          0.00          0.00
90
462             R02          0.55          0.48          0.51
288
463             R03          0.76          0.88          0.82
837
464             no_label          0.76          0.77          0.77
400
465
466             accuracy                                0.73
1625
467             macro avg          0.41          0.43          0.42
1625
468             weighted avg          0.68          0.73          0.70
1625
469
470 WARNING:tensorflow:Compiled the loaded model, but
    the compiled metrics have yet to be built. `model.
    compile_metrics` will be empty until you train or
    evaluate the model.
471 [INFO] saving mask detector model...
472 [INFO] saving label encoder...

```

```
473 dict_keys(['loss', 'accuracy', 'val_loss', '
    val_accuracy', 'lr'])
474
475 Process finished with exit code 0
476
```