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1 G:\raditya\rcnnmobilenetv2\venv310\Scripts\python.exe
  G:\raditya\rcnnmobilenetv2\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 2023-05-23 01:32:55.652374: 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
13 To enable them in other operations, rebuild
TensorFlow with the appropriate compiler flags.
14 2023-05-23 01:32:57.442686: I tensorflow/core/
common_runtime/gpu/gpu_device.cc:1616] Created device
/job:localhost/replica:0/task:0/device:GPU:0 with
9601 MB memory:  -> device: 0, name: NVIDIA GeForce
RTX 3060, pci bus id: 0000:09:00.0, compute
capability: 8.6
15 [INFO] Running With Prunning...
16 Model: "model"
17 -----
-----
18 Layer (type)                      Output Shape
Param #      Connected to
19 =====
=====
20 input_1 (InputLayer)              [(None, 224, 224, 3
0          []
21                                )]
```

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22
23  prune_low_magnitude_Conv1 (PruneLowMagnitude (None, 112, 112, 32
1730      ['input_1[0][0]'])
24  )
25
26  prune_low_magnitude_bn_Conv1 (PruneLowMagnitude (None, 112, 112, 32
129      ['prune_low_magnitude_Conv1[0][0]'])
27  )
28
29  prune_low_magnitude_Conv1_relu (PruneLowMagnitude (None, 112, 112, 32
1      ['prune_low_magnitude_bn_Conv1[0][0]'])
30  )
31
32  prune_low_magnitude_expanded_conv_depthwise (None, 112, 112, 32
289      ['prune_low_magnitude_Conv1_relu[0][0]'])
33  )
34  )
35
36  prune_low_magnitude_expanded_conv_depthwise_BN (None, 112, 112, 32
129      ['prune_low_magnitude_expanded_conv_depthwise[0][0]'])
37  )
38  )

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39
40  prune_low_magnitude_expanded_c (None, 112, 112, 32
    1          ['prune_low_magnitude_expanded_co
41  onv_depthwise_relu (PruneLowMa
    )          nv_depthwise_BN[0][
    0]']
42  gnitude
    )

43
44  prune_low_magnitude_expanded_c (None, 112, 112, 16
    1026       ['prune_low_magnitude_expanded_co
45  onv_project (PruneLowMagnitude
    )          nv_depthwise_relu[0
    ][0]']
46  )

47
48  prune_low_magnitude_expanded_c (None, 112, 112, 16
    65         ['prune_low_magnitude_expanded_co
49  onv_project_BN (PruneLowMagnit
    )          nv_project[0][0
    ]']
50  ude
    )

51
52  prune_low_magnitude_block_1_ex (None, 112, 112, 96
    3074       ['prune_low_magnitude_expanded_co
53  pand (PruneLowMagnitude
    )          )
    nv_project_BN[0][0]']
54

55  prune_low_magnitude_block_1_ex (None, 112, 112, 96
    385       ['prune_low_magnitude_block_1_exp
56  pand_BN (PruneLowMagnitude

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56 ) ) and[0][0]
    ']
57

58 prune_low_magnitude_block_1_ex (None, 112, 112, 96
    1 ['prune_low_magnitude_block_1_exp
59 pand_relu (PruneLowMagnitude
    ) ) and_BN[0][0]
    ']
60

61 prune_low_magnitude_block_1_pa (None, 113, 113, 96
    1 ['prune_low_magnitude_block_1_exp
62 d (PruneLowMagnitude
    ) ) and_relu[
    0][0]']
63

64 prune_low_magnitude_block_1_de (None, 56, 56, 96)
    865 ['prune_low_magnitude_block_1_pad
65 pthwise (PruneLowMagnitude
    ) [0][0]
    ']
66

67 prune_low_magnitude_block_1_de (None, 56, 56, 96)
    385 ['prune_low_magnitude_block_1_dep
68 pthwise_BN (PruneLowMagnitude
    ) thwise[0][0]
    ']
69

70 prune_low_magnitude_block_1_de (None, 56, 56, 96)
    1 ['prune_low_magnitude_block_1_dep
71 pthwise_relu (PruneLowMagnitud
    thwise_BN[0][0]
    ']
72 e
    )

73

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73
74  prune_low_magnitude_block_1_pr (None, 56, 56, 24
   ) 4610      ['prune_low_magnitude_block_1_dep
75  oject (PruneLowMagnitude
   )                                     thwise_relu[
   0][0]']
76

77  prune_low_magnitude_block_1_pr (None, 56, 56, 24
   ) 97      ['prune_low_magnitude_block_1_pro
78  oject_BN (PruneLowMagnitude
   )                                     ject[0][0
   ]']
79

80  prune_low_magnitude_block_2_ex (None, 56, 56, 144
   ) 6914      ['prune_low_magnitude_block_1_pro
81  pand (PruneLowMagnitude
   )                                     ject_BN[0][
   0]']
82

83  prune_low_magnitude_block_2_ex (None, 56, 56, 144
   ) 577      ['prune_low_magnitude_block_2_exp
84  pand_BN (PruneLowMagnitude
   )                                     and[0][0
   ]']
85

86  prune_low_magnitude_block_2_ex (None, 56, 56, 144
   ) 1      ['prune_low_magnitude_block_2_exp
87  pand_relu (PruneLowMagnitude
   )                                     and_BN[0][0
   ]']
88

89  prune_low_magnitude_block_2_de (None, 56, 56, 144
   ) 1297      ['prune_low_magnitude_block_2_exp
90  pthwise (PruneLowMagnitude
   )                                     and_relu[0][0
   ]']

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91

92  prune_low_magnitude_block_2_de (None, 56, 56, 144
   ) 577      ['prune_low_magnitude_block_2_dep
93  pthwise_BN (PruneLowMagnitude
   )                                thwise[0][0
   ]']
94

95  prune_low_magnitude_block_2_de (None, 56, 56, 144
   ) 1        ['prune_low_magnitude_block_2_dep
96  pthwise_relu (PruneLowMagnitud
   )                                thwise_BN[0][0
   ]']
97  e
   )

98

99  prune_low_magnitude_block_2_pr (None, 56, 56, 24
   ) 6914     ['prune_low_magnitude_block_2_dep
100 oject (PruneLowMagnitude
   )                                thwise_relu[
   0][0]']
101

102  prune_low_magnitude_block_2_pr (None, 56, 56, 24
   ) 97       ['prune_low_magnitude_block_2_pro
103 oject_BN (PruneLowMagnitude
   )                                ject[0][0
   ]']
104

105  prune_low_magnitude_block_2_ad (None, 56, 56, 24
   ) 1        ['prune_low_magnitude_block_1_pro
106 d (PruneLowMagnitude
   )                                ject_BN[
   0][0]',
107
   'prune_low_magnitude_block_2_pro
108

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108         ject_BN[0][0]']
109
110     prune_low_magnitude_block_3_ex (None, 56, 56, 144
111     ) 6914 ['prune_low_magnitude_block_2_add
112     pand (PruneLowMagnitude
113     ) [0][0]']
114
115     prune_low_magnitude_block_3_ex (None, 56, 56, 144
116     ) 577 ['prune_low_magnitude_block_3_exp
117     pand_BN (PruneLowMagnitude
118     ) and[0][0]']
119
120     prune_low_magnitude_block_3_ex (None, 56, 56, 144
121     ) 1 ['prune_low_magnitude_block_3_exp
122     pand_relu (PruneLowMagnitude
123     ) and_BN[0][0]']
124
125     prune_low_magnitude_block_3_pa (None, 57, 57, 144
126     ) 1 ['prune_low_magnitude_block_3_exp
127     d (PruneLowMagnitude
128     ) and_relu
129     [0][0]']
130
131     prune_low_magnitude_block_3_de (None, 28, 28, 144
132     ) 1297 ['prune_low_magnitude_block_3_pad
133     pthwise (PruneLowMagnitude
134     ) [0][0]']
135
136     prune_low_magnitude_block_3_de (None, 28, 28, 144
137     ) 577 ['prune_low_magnitude_block_3_dep
138     pthwise_BN (PruneLowMagnitude

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126 )                                     thwise[0][0
    ']
127

128 prune_low_magnitude_block_3_de (None, 28, 28, 144
    ) 1                                ['prune_low_magnitude_block_3_dep
129 pthwise_relu (PruneLowMagnitud
                                     thwise_BN[0][0
    ']
130 e
    )

131

132 prune_low_magnitude_block_3_pr (None, 28, 28, 32
    ) 9218                            ['prune_low_magnitude_block_3_dep
133 oject (PruneLowMagnitud
                                     thwise_relu[
    0][0]']
134

135 prune_low_magnitude_block_3_pr (None, 28, 28, 32
    ) 129                            ['prune_low_magnitude_block_3_pro
136 oject_BN (PruneLowMagnitud
                                     ject[0][0
    ']
137

138 prune_low_magnitude_block_4_ex (None, 28, 28, 192
    ) 12290                          ['prune_low_magnitude_block_3_pro
139 pand (PruneLowMagnitud
                                     ject_BN[0][
    0]']
140

141 prune_low_magnitude_block_4_ex (None, 28, 28, 192
    ) 769                            ['prune_low_magnitude_block_4_exp
142 pand_BN (PruneLowMagnitud
                                     and[0][0
    ']
143

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143
144  prune_low_magnitude_block_4_ex (None, 28, 28, 192
    ) 1 ['prune_low_magnitude_block_4_exp
145  pand_relu (PruneLowMagnitude
    ) and_BN[0][0
    ]']
146
147  prune_low_magnitude_block_4_de (None, 28, 28, 192
    ) 1729 ['prune_low_magnitude_block_4_exp
148  pthwise (PruneLowMagnitude
    ) and_relu[0][0
    ]']
149
150  prune_low_magnitude_block_4_de (None, 28, 28, 192
    ) 769 ['prune_low_magnitude_block_4_dep
151  pthwise_BN (PruneLowMagnitude
    ) thwise[0][0
    ]']
152
153  prune_low_magnitude_block_4_de (None, 28, 28, 192
    ) 1 ['prune_low_magnitude_block_4_dep
154  pthwise_relu (PruneLowMagnitud
    ) thwise_BN[0][0
    ]']
155  e
    )
156
157  prune_low_magnitude_block_4_pr (None, 28, 28, 32
    ) 12290 ['prune_low_magnitude_block_4_dep
158  oject (PruneLowMagnitude
    ) thwise_relu[
    0][0]']
159
160  prune_low_magnitude_block_4_pr (None, 28, 28, 32
    ) 129 ['prune_low_magnitude_block_4_pro

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161 object_BN (PruneLowMagnitude
    )
    ject[0][0]
    ]']
162

163 prune_low_magnitude_block_4_ad (None, 28, 28, 32
    ) 1 ['prune_low_magnitude_block_3_pro
164 d (PruneLowMagnitude
    )
    ject_BN[
    0][0]',
165
    'prune_low_magnitude_block_4_pro
166
    ject_BN[0][0]']
167

168 prune_low_magnitude_block_5_ex (None, 28, 28, 192
    ) 12290 ['prune_low_magnitude_block_4_add
169 pand (PruneLowMagnitude
    )
    [0][0]
    ]']
170

171 prune_low_magnitude_block_5_ex (None, 28, 28, 192
    ) 769 ['prune_low_magnitude_block_5_exp
172 pand_BN (PruneLowMagnitude
    )
    and[0][0]
    ]']
173

174 prune_low_magnitude_block_5_ex (None, 28, 28, 192
    ) 1 ['prune_low_magnitude_block_5_exp
175 pand_relu (PruneLowMagnitude
    )
    and_BN[0][0]
    ]']
176

177 prune_low_magnitude_block_5_de (None, 28, 28, 192
    ) 1729 ['prune_low_magnitude_block_5_exp
178 pthwise (PruneLowMagnitude
    )
    and_relu[0][0]

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178 ]']
179
180 prune_low_magnitude_block_5_de (None, 28, 28, 192
    ) 769 ['prune_low_magnitude_block_5_dep
181 pthwise_BN (PruneLowMagnitude
    ) thwise[0][0
    ]']
182
183 prune_low_magnitude_block_5_de (None, 28, 28, 192
    ) 1 ['prune_low_magnitude_block_5_dep
184 pthwise_relu (PruneLowMagnitud
    ) thwise_BN[0][0
    ]']
185 e
    )
186
187 prune_low_magnitude_block_5_pr (None, 28, 28, 32
    ) 12290 ['prune_low_magnitude_block_5_dep
188 oject (PruneLowMagnitude
    ) thwise_relu[
    0][0]']
189
190 prune_low_magnitude_block_5_pr (None, 28, 28, 32
    ) 129 ['prune_low_magnitude_block_5_pro
191 oject_BN (PruneLowMagnitude
    ) ject[0][0
    ]']
192
193 prune_low_magnitude_block_5_ad (None, 28, 28, 32
    ) 1 ['prune_low_magnitude_block_4_add
194 d (PruneLowMagnitude
    ) [0][0
    ],
195
    'prune_low_magnitude_block_5_pro

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196
           ject_BN[0][0]']
197
198  prune_low_magnitude_block_6_ex (None, 28, 28, 192
    ) 12290      ['prune_low_magnitude_block_5_add
199  pand (PruneLowMagnitude
    )
           [0][0
    ]']
200
201  prune_low_magnitude_block_6_ex (None, 28, 28, 192
    ) 769      ['prune_low_magnitude_block_6_exp
202  pand_BN (PruneLowMagnitude
    )
           and[0][0
    ]']
203
204  prune_low_magnitude_block_6_ex (None, 28, 28, 192
    ) 1      ['prune_low_magnitude_block_6_exp
205  pand_relu (PruneLowMagnitude
    )
           and_BN[0][0
    ]']
206
207  prune_low_magnitude_block_6_pa (None, 29, 29, 192
    ) 1      ['prune_low_magnitude_block_6_exp
208  d (PruneLowMagnitude
    )
           and_relu
    [0][0]']
209
210  prune_low_magnitude_block_6_de (None, 14, 14, 192
    ) 1729      ['prune_low_magnitude_block_6_pad
211  pthwise (PruneLowMagnitude
    )
           [0][0
    ]']
212
213  prune_low_magnitude_block_6_de (None, 14, 14, 192
    ) 769      ['prune_low_magnitude_block_6_dep

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214 pthwise_BN (PruneLowMagnitude
    )
    thwise[0][0]
    ]']
215

216 prune_low_magnitude_block_6_de (None, 14, 14, 192
    ) 1 ['prune_low_magnitude_block_6_dep
217 pthwise_relu (PruneLowMagnitude
    thwise_BN[0][0]
    ]']
218 e
    )

219

220 prune_low_magnitude_block_6_pr (None, 14, 14, 64
    ) 24578 ['prune_low_magnitude_block_6_dep
221 oject (PruneLowMagnitude
    thwise_relu[
    0][0]']
222

223 prune_low_magnitude_block_6_pr (None, 14, 14, 64
    ) 257 ['prune_low_magnitude_block_6_pro
224 oject_BN (PruneLowMagnitude
    ject[0][0]
    ]']
225

226 prune_low_magnitude_block_7_ex (None, 14, 14, 384
    ) 49154 ['prune_low_magnitude_block_6_pro
227 pand (PruneLowMagnitude
    ject_BN[0][
    0]']
228

229 prune_low_magnitude_block_7_ex (None, 14, 14, 384
    ) 1537 ['prune_low_magnitude_block_7_exp
230 pand_BN (PruneLowMagnitude
    and[0][0]
    ]']

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231
232  prune_low_magnitude_block_7_ex (None, 14, 14, 384
    ) 1 ['prune_low_magnitude_block_7_exp
233  pand_relu (PruneLowMagnitude
    ) and_BN[0][0]
    ']
234
235  prune_low_magnitude_block_7_de (None, 14, 14, 384
    ) 3457 ['prune_low_magnitude_block_7_exp
236  pthwise (PruneLowMagnitude
    ) and_relu[0][0]
    ']
237
238  prune_low_magnitude_block_7_de (None, 14, 14, 384
    ) 1537 ['prune_low_magnitude_block_7_dep
239  pthwise_BN (PruneLowMagnitude
    ) thwise[0][0]
    ']
240
241  prune_low_magnitude_block_7_de (None, 14, 14, 384
    ) 1 ['prune_low_magnitude_block_7_dep
242  pthwise_relu (PruneLowMagnitud
    ) thwise_BN[0][0]
    ']
243  e
    )
244
245  prune_low_magnitude_block_7_pr (None, 14, 14, 64
    ) 49154 ['prune_low_magnitude_block_7_dep
246  oject (PruneLowMagnitude
    ) thwise_relu[
    0][0]']
247
248  prune_low_magnitude_block_7_pr (None, 14, 14, 64

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248 ) 257 ['prune_low_magnitude_block_7_pro
249 oject_BN (PruneLowMagnitude
      ) ject[0][0
      ]']
250
251 prune_low_magnitude_block_7_ad (None, 14, 14, 64
      ) 1 ['prune_low_magnitude_block_6_pro
252 d (PruneLowMagnitude
      ) ject_BN[
      0][0]'],
253
      'prune_low_magnitude_block_7_pro
254
      ject_BN[0][0]']
255
256 prune_low_magnitude_block_8_ex (None, 14, 14, 384
      ) 49154 ['prune_low_magnitude_block_7_add
257 pand (PruneLowMagnitude
      ) [0][0
      ]']
258
259 prune_low_magnitude_block_8_ex (None, 14, 14, 384
      ) 1537 ['prune_low_magnitude_block_8_exp
260 pand_BN (PruneLowMagnitude
      ) and[0][0
      ]']
261
262 prune_low_magnitude_block_8_ex (None, 14, 14, 384
      ) 1 ['prune_low_magnitude_block_8_exp
263 pand_relu (PruneLowMagnitude
      ) and_BN[0][0
      ]']
264
265 prune_low_magnitude_block_8_de (None, 14, 14, 384
      ) 3457 ['prune_low_magnitude_block_8_exp
266 pthwise (PruneLowMagnitude

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266 ) and_relu[0][0]
    ]']
267

268 prune_low_magnitude_block_8_de (None, 14, 14, 384
    ) 1537 ['prune_low_magnitude_block_8_dep
269 pthwise_BN (PruneLowMagnitude
    ) thwise[0][0]
    ]']
270

271 prune_low_magnitude_block_8_de (None, 14, 14, 384
    ) 1 ['prune_low_magnitude_block_8_dep
272 pthwise_relu (PruneLowMagnitude
    ) thwise_BN[0][0]
    ]']
273 e
    )

274

275 prune_low_magnitude_block_8_pr (None, 14, 14, 64
    ) 49154 ['prune_low_magnitude_block_8_dep
276 oject (PruneLowMagnitude
    ) thwise_relu[
    0][0]']
277

278 prune_low_magnitude_block_8_pr (None, 14, 14, 64
    ) 257 ['prune_low_magnitude_block_8_pro
279 oject_BN (PruneLowMagnitude
    ) ject[0][0]
    ]']
280

281 prune_low_magnitude_block_8_ad (None, 14, 14, 64
    ) 1 ['prune_low_magnitude_block_7_add
282 d (PruneLowMagnitude
    ) [0][0]
    ],
283

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283         'prune_low_magnitude_block_8_pro
284         ject_BN[0][0]']
285
286     prune_low_magnitude_block_9_ex (None, 14, 14, 384
287     ) 49154 ['prune_low_magnitude_block_8_add
288     pand (PruneLowMagnitude
289     ) [0][0
290     ]']
291
292     prune_low_magnitude_block_9_ex (None, 14, 14, 384
293     ) 1537 ['prune_low_magnitude_block_9_exp
294     pand_BN (PruneLowMagnitude
295     ) and[0][0
296     ]']
297
298     prune_low_magnitude_block_9_ex (None, 14, 14, 384
299     ) 1 ['prune_low_magnitude_block_9_exp
300     pand_relu (PruneLowMagnitude
301     ) and_BN[0][0
302     ]']
303
304     prune_low_magnitude_block_9_de (None, 14, 14, 384
305     ) 3457 ['prune_low_magnitude_block_9_exp
306     pthwise (PruneLowMagnitude
307     ) and_relu[0][0
308     ]']
309
310     prune_low_magnitude_block_9_de (None, 14, 14, 384
311     ) 1537 ['prune_low_magnitude_block_9_dep
312     pthwise_BN (PruneLowMagnitude
313     ) thwise[0][0
314     ]']
315
316     prune_low_magnitude_block_9_de (None, 14, 14, 384

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301 ) 1 ['prune_low_magnitude_block_9_dep
302 pthwise_relu (PruneLowMagnitud
thwise_BN[0][0
]']
303 e
)

304

305 prune_low_magnitude_block_9_pr (None, 14, 14, 64
) 49154 ['prune_low_magnitude_block_9_dep
306 oject (PruneLowMagnitude
thwise_relu[
0][0]']
307

308 prune_low_magnitude_block_9_pr (None, 14, 14, 64
) 257 ['prune_low_magnitude_block_9_pro
309 oject_BN (PruneLowMagnitude
ject[0][0
]']
310

311 prune_low_magnitude_block_9_ad (None, 14, 14, 64
) 1 ['prune_low_magnitude_block_8_add
312 d (PruneLowMagnitude
[0][0
]',
313
'prune_low_magnitude_block_9_pro
314
ject_BN[0][0]']
315

316 prune_low_magnitude_block_10_e (None, 14, 14, 384
) 49154 ['prune_low_magnitude_block_9_add
317 xpand (PruneLowMagnitude
[0][0
]']
318

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319  prune_low_magnitude_block_10_e (None, 14, 14, 384
    ) 1537      ['prune_low_magnitude_block_10_ex
320  xpad_BN (PruneLowMagnitude
    )                                pand[0][0
    ']
321
322  prune_low_magnitude_block_10_e (None, 14, 14, 384
    ) 1      ['prune_low_magnitude_block_10_ex
323  xpad_relu (PruneLowMagnitude
    )                                pand_BN[0][0
    ']
324
325  prune_low_magnitude_block_10_d (None, 14, 14, 384
    ) 3457    ['prune_low_magnitude_block_10_ex
326  epthwise (PruneLowMagnitude
    )                                pand_relu[0][0
    ']
327
328  prune_low_magnitude_block_10_d (None, 14, 14, 384
    ) 1537    ['prune_low_magnitude_block_10_de
329  epthwise_BN (PruneLowMagnitude
    )                                pthwise[0][0
    ']
330  )
331
332  prune_low_magnitude_block_10_d (None, 14, 14, 384
    ) 1      ['prune_low_magnitude_block_10_de
333  epthwise_relu (PruneLowMagnitu
    )                                pthwise_BN[0][0
    ']
334  de
    )
335
336  prune_low_magnitude_block_10_p (None, 14, 14, 96

```

```

336 ) 73730 ['prune_low_magnitude_block_10_de
337 roject (PruneLowMagnitude
      )
      pthwise_relu[
0][0]']
338
339 prune_low_magnitude_block_10_p (None, 14, 14, 96
   ) 385 ['prune_low_magnitude_block_10_pr
340 roject_BN (PruneLowMagnitude
      )
      oject[0][0
   ]']
341
342 prune_low_magnitude_block_11_e (None, 14, 14, 576
   ) 110594 ['prune_low_magnitude_block_10_pr
343 xband (PruneLowMagnitude
      )
      oject_BN[0][
0]']
344
345 prune_low_magnitude_block_11_e (None, 14, 14, 576
   ) 2305 ['prune_low_magnitude_block_11_ex
346 xband_BN (PruneLowMagnitude
      )
      pand[0][0
   ]']
347
348 prune_low_magnitude_block_11_e (None, 14, 14, 576
   ) 1 ['prune_low_magnitude_block_11_ex
349 xband_relu (PruneLowMagnitude
      )
      pand_BN[0][0
   ]']
350
351 prune_low_magnitude_block_11_d (None, 14, 14, 576
   ) 5185 ['prune_low_magnitude_block_11_ex
352 epthwise (PruneLowMagnitude
      )
      pand_relu[0][0
   ]']
353

```

```

354  prune_low_magnitude_block_11_d (None, 14, 14, 576
    ) 2305      ['prune_low_magnitude_block_11_de
355  epthwise_BN (PruneLowMagnitude
                                pthwise[0][0
    ]']
356  )

357

358  prune_low_magnitude_block_11_d (None, 14, 14, 576
    ) 1      ['prune_low_magnitude_block_11_de
359  epthwise_relu (PruneLowMagnitu
                                pthwise_BN[0][0
    ]']
360  de
    )

361

362  prune_low_magnitude_block_11_p (None, 14, 14, 96
    ) 110594  ['prune_low_magnitude_block_11_de
363  roject (PruneLowMagnitude
                                pthwise_relu[
    0][0]']
364

365  prune_low_magnitude_block_11_p (None, 14, 14, 96
    ) 385      ['prune_low_magnitude_block_11_pr
366  roject_BN (PruneLowMagnitude
                                oject[0][0
    ]']
367

368  prune_low_magnitude_block_11_a (None, 14, 14, 96
    ) 1      ['prune_low_magnitude_block_10_pr
369  dd (PruneLowMagnitude
                                oject_BN[
    0][0]',
370
    'prune_low_magnitude_block_11_pr
371

```

```

371         object_BN[0][0]']
372
373     prune_low_magnitude_block_12_e (None, 14, 14, 576
    ) 110594 ['prune_low_magnitude_block_11_ad
374     xpad (PruneLowMagnitude
    )
    d[0][0]
    ']
375
376     prune_low_magnitude_block_12_e (None, 14, 14, 576
    ) 2305 ['prune_low_magnitude_block_12_ex
377     xpad_BN (PruneLowMagnitude
    )
    pand[0][0]
    ']
378
379     prune_low_magnitude_block_12_e (None, 14, 14, 576
    ) 1 ['prune_low_magnitude_block_12_ex
380     xpad_relu (PruneLowMagnitude
    )
    pand_BN[0][0]
    ']
381
382     prune_low_magnitude_block_12_d (None, 14, 14, 576
    ) 5185 ['prune_low_magnitude_block_12_ex
383     epthwise (PruneLowMagnitude
    )
    pand_relu[0][0]
    ']
384
385     prune_low_magnitude_block_12_d (None, 14, 14, 576
    ) 2305 ['prune_low_magnitude_block_12_de
386     epthwise_BN (PruneLowMagnitude
    )
    pthwise[0][0]
    ']
387 )
388
389     prune_low_magnitude_block_12_d (None, 14, 14, 576

```

```

389 ) 1 ['prune_low_magnitude_block_12_de
390     pthwise_relu (PruneLowMagnitu
                                pthwise_BN[0][0
                                ]']
391     de
    )

392

393     prune_low_magnitude_block_12_p (None, 14, 14, 96
    ) 110594 ['prune_low_magnitude_block_12_de
394     roject (PruneLowMagnitude
                                pthwise_relu[
                                0][0]']
395

396     prune_low_magnitude_block_12_p (None, 14, 14, 96
    ) 385 ['prune_low_magnitude_block_12_pr
397     roject_BN (PruneLowMagnitude
                                oject[0][0
                                ]']
398

399     prune_low_magnitude_block_12_a (None, 14, 14, 96
    ) 1 ['prune_low_magnitude_block_11_ad
400     dd (PruneLowMagnitude
                                d[0][0
                                ],
401
                                'prune_low_magnitude_block_12_pr
402
                                oject_BN[0][0]']
403

404     prune_low_magnitude_block_13_e (None, 14, 14, 576
    ) 110594 ['prune_low_magnitude_block_12_ad
405     xpand (PruneLowMagnitude
                                d[0][0
                                ]']
406

```

```

407  prune_low_magnitude_block_13_e (None, 14, 14, 576
    ) 2305      ['prune_low_magnitude_block_13_ex
408  xpand_BN (PruneLowMagnitude
    )                                pand[0][0
    ]']
409

410  prune_low_magnitude_block_13_e (None, 14, 14, 576
    ) 1      ['prune_low_magnitude_block_13_ex
411  xpand_relu (PruneLowMagnitude
    )                                pand_BN[0][0
    ]']
412

413  prune_low_magnitude_block_13_p (None, 15, 15, 576
    ) 1      ['prune_low_magnitude_block_13_ex
414  ad (PruneLowMagnitude
    )                                pand_relu
    [0][0]']
415

416  prune_low_magnitude_block_13_d (None, 7, 7, 576
    ) 5185      ['prune_low_magnitude_block_13_pa
417  epthwise (PruneLowMagnitude
    )                                d[0][0
    ]']
418

419  prune_low_magnitude_block_13_d (None, 7, 7, 576
    ) 2305      ['prune_low_magnitude_block_13_de
420  epthwise_BN (PruneLowMagnitude
    )                                pthwise[0][0
    ]']
421  )

422

423  prune_low_magnitude_block_13_d (None, 7, 7, 576
    ) 1      ['prune_low_magnitude_block_13_de
424  epthwise_relu (PruneLowMagnitu
    )                                pthwise_BN[0][0

```



```

424  ]']
425  de
    )

426

427  prune_low_magnitude_block_13_p (None, 7, 7, 160
    ) 184322 ['prune_low_magnitude_block_13_de
428  roject (PruneLowMagnitude
    ) pthwise_relu[
    0][0]']
429

430  prune_low_magnitude_block_13_p (None, 7, 7, 160
    ) 641 ['prune_low_magnitude_block_13_pr
431  roject_BN (PruneLowMagnitude
    ) oject[0][0
    ]']
432

433  prune_low_magnitude_block_14_e (None, 7, 7, 960
    ) 307202 ['prune_low_magnitude_block_13_pr
434  xband (PruneLowMagnitude
    ) oject_BN[0][
    0]']
435

436  prune_low_magnitude_block_14_e (None, 7, 7, 960
    ) 3841 ['prune_low_magnitude_block_14_ex
437  xband_BN (PruneLowMagnitude
    ) pand[0][0
    ]']
438

439  prune_low_magnitude_block_14_e (None, 7, 7, 960
    ) 1 ['prune_low_magnitude_block_14_ex
440  xband_relu (PruneLowMagnitude
    ) pand_BN[0][0
    ]']
441

```

```

442  prune_low_magnitude_block_14_d (None, 7, 7, 960
    ) 8641 ['prune_low_magnitude_block_14_ex
443  epthwise (PruneLowMagnitude
    ) pand_relu[0][0
    ]']
444
445  prune_low_magnitude_block_14_d (None, 7, 7, 960
    ) 3841 ['prune_low_magnitude_block_14_de
446  epthwise_BN (PruneLowMagnitude
    ) pthwise[0][0
    ]']
447  )
448
449  prune_low_magnitude_block_14_d (None, 7, 7, 960
    ) 1 ['prune_low_magnitude_block_14_de
450  epthwise_relu (PruneLowMagnitu
    ) pthwise_BN[0][0
    ]']
451  de
    )
452
453  prune_low_magnitude_block_14_p (None, 7, 7, 160
    ) 307202 ['prune_low_magnitude_block_14_de
454  roject (PruneLowMagnitude
    ) pthwise_relu[
    0][0]']
455
456  prune_low_magnitude_block_14_p (None, 7, 7, 160
    ) 641 ['prune_low_magnitude_block_14_pr
457  roject_BN (PruneLowMagnitude
    ) oject[0][0
    ]']
458
459  prune_low_magnitude_block_14_a (None, 7, 7, 160

```

```

459 ) 1 ['prune_low_magnitude_block_13_pr
460 dd (PruneLowMagnitude
      )
      object_BN[
      0][0]',
461
      'prune_low_magnitude_block_14_pr
462
      object_BN[0][0]']
463
464 prune_low_magnitude_block_15_e (None, 7, 7, 960
      ) 307202 ['prune_low_magnitude_block_14_ad
465 xpend (PruneLowMagnitude
      )
      d[0][0
      ]']
466
467 prune_low_magnitude_block_15_e (None, 7, 7, 960
      ) 3841 ['prune_low_magnitude_block_15_ex
468 xpend_BN (PruneLowMagnitude
      )
      pand[0][0
      ]']
469
470 prune_low_magnitude_block_15_e (None, 7, 7, 960
      ) 1 ['prune_low_magnitude_block_15_ex
471 xpend_relu (PruneLowMagnitude
      )
      pand_BN[0][0
      ]']
472
473 prune_low_magnitude_block_15_d (None, 7, 7, 960
      ) 8641 ['prune_low_magnitude_block_15_ex
474 epthwise (PruneLowMagnitude
      )
      pand_relu[0][0
      ]']
475
476 prune_low_magnitude_block_15_d (None, 7, 7, 960
      ) 3841 ['prune_low_magnitude_block_15_de
477 epthwise_BN (PruneLowMagnitude

```

```

477                                     pthwise[0][0
    ]']
478 )

479

480 prune_low_magnitude_block_15_d (None, 7, 7, 960
    ) 1 ['prune_low_magnitude_block_15_de
481 epthwise_relu (PruneLowMagnitu
                                     pthwise_BN[0][0
    ]']
482 de
    )

483

484 prune_low_magnitude_block_15_p (None, 7, 7, 160
    ) 307202 ['prune_low_magnitude_block_15_de
485 roject (PruneLowMagnitude
                                     pthwise_relu[
    0][0]']
486

487 prune_low_magnitude_block_15_p (None, 7, 7, 160
    ) 641 ['prune_low_magnitude_block_15_pr
488 roject_BN (PruneLowMagnitude
                                     oject[0][0
    ]']
489

490 prune_low_magnitude_block_15_a (None, 7, 7, 160
    ) 1 ['prune_low_magnitude_block_14_ad
491 dd (PruneLowMagnitude
                                     d[0][0
    ]',
492
    'prune_low_magnitude_block_15_pr
493
    oject_BN[0][0]']
494

```

```

495  prune_low_magnitude_block_16_e (None, 7, 7, 960
    ) 307202 ['prune_low_magnitude_block_15_ad
496  xprand (PruneLowMagnitude
    ) d[0][0]
    ']
497

498  prune_low_magnitude_block_16_e (None, 7, 7, 960
    ) 3841 ['prune_low_magnitude_block_16_ex
499  xprand_BN (PruneLowMagnitude
    ) pand[0][0]
    ']
500

501  prune_low_magnitude_block_16_e (None, 7, 7, 960
    ) 1 ['prune_low_magnitude_block_16_ex
502  xprand_relu (PruneLowMagnitude
    ) pand_BN[0][0]
    ']
503

504  prune_low_magnitude_block_16_d (None, 7, 7, 960
    ) 8641 ['prune_low_magnitude_block_16_ex
505  epthwise (PruneLowMagnitude
    ) pand_relu[0][0]
    ']
506

507  prune_low_magnitude_block_16_d (None, 7, 7, 960
    ) 3841 ['prune_low_magnitude_block_16_de
508  epthwise_BN (PruneLowMagnitude
    ) pthwise[0][0]
    ']
509  )

510

511  prune_low_magnitude_block_16_d (None, 7, 7, 960
    ) 1 ['prune_low_magnitude_block_16_de
512  epthwise_relu (PruneLowMagnitu
    ) pthwise_BN[0][0]

```

```

512  ]']
513  de
    )

514

515  prune_low_magnitude_block_16_p (None, 7, 7, 320
    ) 614402 ['prune_low_magnitude_block_16_de
516  roject (PruneLowMagnitude
    ) pthwise_relu[
    0][0]']
517

518  prune_low_magnitude_block_16_p (None, 7, 7, 320
    ) 1281 ['prune_low_magnitude_block_16_pr
519  roject_BN (PruneLowMagnitude
    ) oject[0][0
    ]']
520

521  prune_low_magnitude_Conv_1 (Pr (None, 7, 7, 1280
    ) 819202 ['prune_low_magnitude_block_16_pr
522  uneLowMagnitude
    )
    oject_BN[0][0]']
523

524  prune_low_magnitude_Conv_1_bn (None, 7, 7, 1280
    ) 5121 ['prune_low_magnitude_Conv_1[0][0
525  (PruneLowMagnitude
    ) ]']

526

527  prune_low_magnitude_out_relu ( (None, 7, 7, 1280
    ) 1 ['prune_low_magnitude_Conv_1_bn[0
528  PruneLowMagnitude
    ) ][0
    ]']
529

```

```

530  prune_low_magnitude_average_po (None, 1, 1, 1280
    ) 1 ['prune_low_magnitude_out_relu[0]
531  oling2d (PruneLowMagnitude
    ) [0
    ]']
532
533  prune_low_magnitude_flatten (P (None, 1280
    ) 1 ['
    prune_low_magnitude_average_poo
534  runeLowMagnitude
    )
    ling2d[0][0]']
535
536  prune_low_magnitude_dense (Pru (None, 128
    ) 327810 ['prune_low_magnitude_flatten[
    0][
537  neLowMagnitude
    ) 0
    ]']
538
539  prune_low_magnitude_dropout (P (None, 128
    ) 1 ['prune_low_magnitude_dense[0
    ][0]
540  runeLowMagnitude
    ) ']'
541
542  prune_low_magnitude_dense_1 (P (None, 5
    ) 1287 ['
    prune_low_magnitude_dropout[0][
543  runeLowMagnitude
    ) 0
    ]']
544
545  =====
    =====

```

```

546 Total params: 4,712,808
547 Trainable params: 164,613
548 Non-trainable params: 4,548,195
549 -----
550 None
551 [INFO] training head...
552 Epoch 1/70
553 2023-05-23 01:33:22.754376: I tensorflow/
stream_executor/cuda/cuda_dnn.cc:384] Loaded cuDNN
version 8100
554 2023-05-23 01:33:25.953490: I tensorflow/
stream_executor/cuda/cuda_blas.cc:1614] TensorFloat-
32 will be used for the matrix multiplication. This
will only be logged once.
555 15/15 [=====] - ETA: 0s -
loss: 1.2386 - accuracy: 0.53002023-05-23 01:33:43.
419478: W tensorflow/core/framework/
cpu_allocator_impl.cc:82] Allocation of 1025396736
exceeds 10% of free system memory.
556 15/15 [=====] - 46s 1s/step
- loss: 1.2386 - accuracy: 0.5300 - val_loss: 0.
5566 - val_accuracy: 0.8415
557 Epoch 2/70
558 15/15 [=====] - 20s 1s/step
- loss: 0.6963 - accuracy: 0.7882 - val_loss: 0.
4077 - val_accuracy: 0.8931
559 Epoch 3/70
560 15/15 [=====] - 21s 1s/step
- loss: 0.5237 - accuracy: 0.8404 - val_loss: 0.
3444 - val_accuracy: 0.9090
561 Epoch 4/70
562 15/15 [=====] - 20s 1s/step
- loss: 0.4576 - accuracy: 0.8643 - val_loss: 0.
3074 - val_accuracy: 0.9137
563 Epoch 5/70
564 15/15 [=====] - 21s 1s/step
- loss: 0.3959 - accuracy: 0.8794 - val_loss: 0.
2833 - val_accuracy: 0.9143
565 Epoch 6/70
566 15/15 [=====] - 21s 1s/step

```



```
566 - loss: 0.3751 - accuracy: 0.8867 - val_loss: 0.  
    2651 - val_accuracy: 0.9160  
567 Epoch 7/70  
568 15/15 [=====] - 21s 1s/step  
    - loss: 0.3587 - accuracy: 0.8934 - val_loss: 0.  
    2770 - val_accuracy: 0.9125  
569 Epoch 8/70  
570 15/15 [=====] - 21s 1s/step  
    - loss: 0.3556 - accuracy: 0.8907 - val_loss: 0.  
    2634 - val_accuracy: 0.9172  
571 Epoch 9/70  
572 15/15 [=====] - 21s 1s/step  
    - loss: 0.3410 - accuracy: 0.8964 - val_loss: 0.  
    2536 - val_accuracy: 0.9190  
573 Epoch 10/70  
574 15/15 [=====] - 21s 1s/step  
    - loss: 0.3383 - accuracy: 0.8918 - val_loss: 0.  
    2442 - val_accuracy: 0.9184  
575 Epoch 11/70  
576 15/15 [=====] - 21s 1s/step  
    - loss: 0.3156 - accuracy: 0.9044 - val_loss: 0.  
    2393 - val_accuracy: 0.9196  
577 Epoch 12/70  
578 15/15 [=====] - 21s 1s/step  
    - loss: 0.3059 - accuracy: 0.9082 - val_loss: 0.  
    2351 - val_accuracy: 0.9196  
579 Epoch 13/70  
580 15/15 [=====] - 21s 1s/step  
    - loss: 0.3045 - accuracy: 0.9052 - val_loss: 0.  
    2299 - val_accuracy: 0.9219  
581 Epoch 14/70  
582 15/15 [=====] - 21s 1s/step  
    - loss: 0.4942 - accuracy: 0.8571 - val_loss: 0.  
    3878 - val_accuracy: 0.8767  
583 Epoch 15/70  
584 15/15 [=====] - 21s 1s/step  
    - loss: 0.4475 - accuracy: 0.8676 - val_loss: 0.  
    3116 - val_accuracy: 0.8955  
585 Epoch 16/70  
586 15/15 [=====] - 21s 1s/step  
    - loss: 0.3772 - accuracy: 0.8883 - val_loss: 0.
```

```

586 2963 - val_accuracy: 0.8984
587 [INFO] evaluating network...
588 2023-05-23 01:38:58.340682: W tensorflow/core/
framework/cpu_allocator_impl.cc:82] Allocation of
1025396736 exceeds 10% of free system memory.
589 7/7 [=====] - 2s 220ms/step
590 G:\raditya\rcnnmobilenetv2\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.
591     _warn_prf(average, modifier, msg_start, len(result
))
592 G:\raditya\rcnnmobilenetv2\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.
593     _warn_prf(average, modifier, msg_start, len(result
))
594 G:\raditya\rcnnmobilenetv2\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.
595     _warn_prf(average, modifier, msg_start, len(result
))
596
           precision    recall  f1-score
support
597
598      00      0.00      0.00      0.00
599      100      0.00      0.00      0.00
600      33      0.80      0.14      0.24
601      114      0.80      0.98      0.88
602      488

```

```

602     no_label          0.95      0.97      0.96
        1067
603
604     accuracy          0.90
        1703
605     macro avg        0.51      0.42      0.42
        1703
606     weighted avg     0.88      0.90      0.87
        1703
607
608 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.
609 [INFO] saving mask detector model...
610 [INFO] saving label encoder...
611 dict_keys(['loss', 'accuracy', 'val_loss', '
        val_accuracy'])
612 Traceback (most recent call last):
613   File "G:\raditya\rcnnmobilenetv2\fine_tune_rcnn.py
        ", line 252, in <module>
614     plt.plot(np.arange(0, N), H.history["loss"],
        label="train_loss")
615   File "G:\raditya\rcnnmobilenetv2\venv310\lib\site-
        packages\matplotlib\pyplot.py", line 2812, in plot
616     return gca().plot(
617   File "G:\raditya\rcnnmobilenetv2\venv310\lib\site-
        packages\matplotlib\axes\_axes.py", line 1688, in
        plot
618     lines = [*self._get_lines(*args, data=data, **
        kwargs)]
619   File "G:\raditya\rcnnmobilenetv2\venv310\lib\site-
        packages\matplotlib\axes\_base.py", line 311, in
        __call__
620     yield from self._plot_args(
621   File "G:\raditya\rcnnmobilenetv2\venv310\lib\site-
        packages\matplotlib\axes\_base.py", line 504, in
        _plot_args
622     raise ValueError(f"x and y must have same first
        dimension, but ")
623 ValueError: x and y must have same first dimension,

```

```
623 but have shapes (70,) and (16,)
624
625 Process finished with exit code 1
626
```