Model: "model"
_____

 Layer (type)   Output Shape   Param #   Connected to
==
 input_1 (InputLayer)   [(None, 512, 512, 3   0   []
)]

 conv1_pad (ZeroPadding2D)   (None, 518, 518, 3)   0   ['input_1[0][0]']

 conv1_conv (Conv2D)   (None, 256, 256, 64   9472   ['conv1_pad[0]
                                                                    [0]']
)

 conv1_bn (BatchNormalization) (None, 256, 256, 64   256   ['conv1_conv[0]
                                                                    [0]']
)

 conv1_relu (Activation)   (None, 256, 256, 64   0   ['conv1_bn[0]
                                                                    [0]']
)

 pool1_pad (ZeroPadding2D)   (None, 258, 258, 64   0   ['conv1_relu[0]
                                                                    [0]']
)

 pool1_pool (MaxPooling2D)   (None, 128, 128, 64   0   ['pool1_pad[0]
                                                                    [0]']
)

 conv2_block1_1_conv (Conv2D)   (None, 128, 128, 64   4160   ['pool1_pool[0]
                                                                    [0]']
)

 conv2_block1_1_bn (BatchNormal (None, 128, 128, 64   256   ['conv2_block1_1_
 ization)   )   conv[0][0]']

 conv2_block1_1_relu (Activatio (None, 128, 128, 64   0   ['conv2_block1_1_
 n)   )   bn[0][0]']

 conv2_block1_2_conv (Conv2D)   (None, 128, 128, 64   36928   ['conv2_block1_1_
)   relu[0][0]']

 conv2_block1_2_bn (BatchNormal (None, 128, 128, 64   256   ['conv2_block1_2_
 ization)   )   conv[0][0]']

 conv2_block1_2_relu (Activatio (None, 128, 128, 64   0   ['conv2_block1_2_
 n)   )   bn[0][0]']

 conv2_block1_0_conv (Conv2D)   (None, 128, 128, 25   16640   ['pool1_pool[0]
                                6)   [0]']

 conv2_block1_3_conv (Conv2D)   (None, 128, 128, 25   16640   ['conv2_block1_2_
                                                                    relu[0][0]']

Layer (type)	Output Shape	Param #	Connected to
		6)	
conv2_block1_0_bn (BatchNormal ization)	(None, 128, 128, 25 6)	1024	['conv2_block1_0_ conv[0][0]']
conv2_block1_3_bn (BatchNormal ization)	(None, 128, 128, 25 6)	1024	['conv2_block1_3_ conv[0][0]']
conv2_block1_add (Add)	(None, 128, 128, 25 6)	0	['conv2_block1_0_ bn[0][0]', 'conv2_block1_3_ bn[0][0]']
conv2_block1_out (Activation)	(None, 128, 128, 25 6)	0	['conv2_block1_ad d[0][0]']
conv2_block2_1_conv (Conv2D)	(None, 128, 128, 64)	16448	['conv2_block1_ou t[0][0]']
conv2_block2_1_bn (BatchNormal ization)	(None, 128, 128, 64)	256	['conv2_block2_1_ conv[0][0]']
conv2_block2_1_relu (Activatio n)	(None, 128, 128, 64)	0	['conv2_block2_1_ bn[0][0]']
conv2_block2_2_conv (Conv2D)	(None, 128, 128, 64)	36928	['conv2_block2_1_ relu[0][0]']
conv2_block2_2_bn (BatchNormal ization)	(None, 128, 128, 64)	256	['conv2_block2_2_ conv[0][0]']
conv2_block2_2_relu (Activatio n)	(None, 128, 128, 64)	0	['conv2_block2_2_ bn[0][0]']
conv2_block2_3_conv (Conv2D)	(None, 128, 128, 25 6)	16640	['conv2_block2_2_ relu[0][0]']
conv2_block2_3_bn (BatchNormal ization)	(None, 128, 128, 25 6)	1024	['conv2_block2_3_ conv[0][0]']
conv2_block2_add (Add)	(None, 128, 128, 25 6)	0	['conv2_block1_ou t[0][0]', 'conv2_block2_3_ bn[0][0]']
conv2_block2_out (Activation)	(None, 128, 128, 25 6)	0	['conv2_block2_ad d[0][0]']
conv2_block3_1_conv (Conv2D)	(None, 128, 128, 64	16448	['conv2_block2_ou

```
t[0][0]']
                                        )

 conv2_block3_1_bn (BatchNormal  (None, 128, 128, 64  256         ['conv2_block3_1_
 ization)                        )                                  conv[0][0]']

 conv2_block3_1_relu (Activatio  (None, 128, 128, 64  0           ['conv2_block3_1_
 n)                              )                                  bn[0][0]']

 conv2_block3_2_conv (Conv2D)    (None, 128, 128, 64  36928       ['conv2_block3_1_
                                 )                                  relu[0][0]']

 conv2_block3_2_bn (BatchNormal  (None, 128, 128, 64  256         ['conv2_block3_2_
 ization)                        )                                  conv[0][0]']

 conv2_block3_2_relu (Activatio  (None, 128, 128, 64  0           ['conv2_block3_2_
 n)                              )                                  bn[0][0]']

 conv2_block3_3_conv (Conv2D)    (None, 128, 128, 25  16640       ['conv2_block3_2_
                                 6)                                 relu[0][0]']

 conv2_block3_3_bn (BatchNormal  (None, 128, 128, 25  1024        ['conv2_block3_3_
 ization)                        6)                                 conv[0][0]']

 conv2_block3_add (Add)          (None, 128, 128, 25  0           ['conv2_block2_ou
                                 6)                                 t[0][0]',
                                                                    'conv2_block3_3_
                                                                    bn[0][0]']

 conv2_block3_out (Activation)   (None, 128, 128, 25  0           ['conv2_block3_ad
                                 6)                                 d[0][0]']

 conv3_block1_1_conv (Conv2D)    (None, 64, 64, 128)  32896       ['conv2_block3_ou
                                                                    t[0][0]']

 conv3_block1_1_bn (BatchNormal  (None, 64, 64, 128)  512         ['conv3_block1_1_
 ization)                                                           conv[0][0]']

 conv3_block1_1_relu (Activatio  (None, 64, 64, 128)  0           ['conv3_block1_1_
 n)                                                                 bn[0][0]']

 conv3_block1_2_conv (Conv2D)    (None, 64, 64, 128)  147584      ['conv3_block1_1_
                                                                    relu[0][0]']

 conv3_block1_2_bn (BatchNormal  (None, 64, 64, 128)  512         ['conv3_block1_2_
 ization)                                                           conv[0][0]']

 conv3_block1_2_relu (Activatio  (None, 64, 64, 128)  0           ['conv3_block1_2_
 n)                                                                 bn[0][0]']
```

```
 conv3_block1_0_conv (Conv2D)    (None, 64, 64, 512)   131584      ['conv2_block3_ou
t[0][0]']

 conv3_block1_3_conv (Conv2D)    (None, 64, 64, 512)   66048       ['conv3_block1_2_
relu[0][0]']

 conv3_block1_0_bn (BatchNormal  (None, 64, 64, 512)   2048        ['conv3_block1_0_
conv[0][0]']
 ization)

 conv3_block1_3_bn (BatchNormal  (None, 64, 64, 512)   2048        ['conv3_block1_3_
conv[0][0]']
 ization)

 conv3_block1_add (Add)          (None, 64, 64, 512)   0           ['conv3_block1_0_
bn[0][0]',

                                                                    'conv3_block1_3_
bn[0][0]']

 conv3_block1_out (Activation)   (None, 64, 64, 512)   0           ['conv3_block1_ad
d[0][0]']

 conv3_block2_1_conv (Conv2D)    (None, 64, 64, 128)   65664       ['conv3_block1_ou
t[0][0]']

 conv3_block2_1_bn (BatchNormal  (None, 64, 64, 128)   512         ['conv3_block2_1_
conv[0][0]']
 ization)

 conv3_block2_1_relu (Activatio  (None, 64, 64, 128)   0           ['conv3_block2_1_
bn[0][0]']
 n)

 conv3_block2_2_conv (Conv2D)    (None, 64, 64, 128)   147584      ['conv3_block2_1_
relu[0][0]']

 conv3_block2_2_bn (BatchNormal  (None, 64, 64, 128)   512         ['conv3_block2_2_
conv[0][0]']
 ization)

 conv3_block2_2_relu (Activatio  (None, 64, 64, 128)   0           ['conv3_block2_2_
bn[0][0]']
 n)

 conv3_block2_3_conv (Conv2D)    (None, 64, 64, 512)   66048       ['conv3_block2_2_
relu[0][0]']

 conv3_block2_3_bn (BatchNormal  (None, 64, 64, 512)   2048        ['conv3_block2_3_
conv[0][0]']
 ization)

 conv3_block2_add (Add)          (None, 64, 64, 512)   0           ['conv3_block1_ou
t[0][0]',

                                                                    'conv3_block2_3_
bn[0][0]']

 conv3_block2_out (Activation)   (None, 64, 64, 512)   0           ['conv3_block2_ad
d[0][0]']

 conv3_block3_1_conv (Conv2D)    (None, 64, 64, 128)   65664       ['conv3_block2_ou
```

```
t[0][0]']

 conv3_block3_1_bn (BatchNormal   (None, 64, 64, 128)   512        ['conv3_block3_1_
 conv[0][0]']
 ization)

 conv3_block3_1_relu (Activatio   (None, 64, 64, 128)   0          ['conv3_block3_1_
 bn[0][0]']
 n)

 conv3_block3_2_conv (Conv2D)     (None, 64, 64, 128)   147584     ['conv3_block3_1_
 relu[0][0]']

 conv3_block3_2_bn (BatchNormal   (None, 64, 64, 128)   512        ['conv3_block3_2_
 conv[0][0]']
 ization)

 conv3_block3_2_relu (Activatio   (None, 64, 64, 128)   0          ['conv3_block3_2_
 bn[0][0]']
 n)

 conv3_block3_3_conv (Conv2D)     (None, 64, 64, 512)   66048      ['conv3_block3_2_
 relu[0][0]']

 conv3_block3_3_bn (BatchNormal   (None, 64, 64, 512)   2048       ['conv3_block3_3_
 conv[0][0]']
 ization)

 conv3_block3_add (Add)           (None, 64, 64, 512)   0          ['conv3_block2_ou
 t[0][0]',

                                                                    'conv3_block3_3_

 bn[0][0]']

 conv3_block3_out (Activation)    (None, 64, 64, 512)   0          ['conv3_block3_ad
 d[0][0]']

 conv3_block4_1_conv (Conv2D)     (None, 64, 64, 128)   65664      ['conv3_block3_ou
 t[0][0]']

 conv3_block4_1_bn (BatchNormal   (None, 64, 64, 128)   512        ['conv3_block4_1_
 conv[0][0]']
 ization)

 conv3_block4_1_relu (Activatio   (None, 64, 64, 128)   0          ['conv3_block4_1_
 bn[0][0]']
 n)

 conv3_block4_2_conv (Conv2D)     (None, 64, 64, 128)   147584     ['conv3_block4_1_
 relu[0][0]']

 conv3_block4_2_bn (BatchNormal   (None, 64, 64, 128)   512        ['conv3_block4_2_
 conv[0][0]']
 ization)

 conv3_block4_2_relu (Activatio   (None, 64, 64, 128)   0          ['conv3_block4_2_
 bn[0][0]']
 n)

 conv3_block4_3_conv (Conv2D)     (None, 64, 64, 512)   66048      ['conv3_block4_2_
 relu[0][0]']
```

```
 conv3_block4_3_bn (BatchNormal  (None, 64, 64, 512)  2048        ['conv3_block4_3_
 conv[0][0]']
 ization)

 conv3_block4_add (Add)          (None, 64, 64, 512)  0           ['conv3_block3_ou
 t[0][0]',

                                                                   'conv3_block4_3_
 bn[0][0]']

 conv3_block4_out (Activation)   (None, 64, 64, 512)  0           ['conv3_block4_ad
 d[0][0]']

 conv4_block1_1_conv (Conv2D)    (None, 32, 32, 256)  131328      ['conv3_block4_ou
 t[0][0]']

 conv4_block1_1_bn (BatchNormal  (None, 32, 32, 256)  1024        ['conv4_block1_1_
 conv[0][0]']
 ization)

 conv4_block1_1_relu (Activatio  (None, 32, 32, 256)  0           ['conv4_block1_1_
 bn[0][0]']
 n)

 conv4_block1_2_conv (Conv2D)    (None, 32, 32, 256)  590080      ['conv4_block1_1_
 relu[0][0]']

 conv4_block1_2_bn (BatchNormal  (None, 32, 32, 256)  1024        ['conv4_block1_2_
 conv[0][0]']
 ization)

 conv4_block1_2_relu (Activatio  (None, 32, 32, 256)  0           ['conv4_block1_2_
 bn[0][0]']
 n)

 conv4_block1_0_conv (Conv2D)    (None, 32, 32, 1024  525312      ['conv3_block4_ou
 t[0][0]']
                                 )

 conv4_block1_3_conv (Conv2D)    (None, 32, 32, 1024  263168      ['conv4_block1_2_
 relu[0][0]']
                                 )

 conv4_block1_0_bn (BatchNormal  (None, 32, 32, 1024  4096        ['conv4_block1_0_
 conv[0][0]']
 ization)                        )

 conv4_block1_3_bn (BatchNormal  (None, 32, 32, 1024  4096        ['conv4_block1_3_
 conv[0][0]']
 ization)                        )

 conv4_block1_add (Add)          (None, 32, 32, 1024  0           ['conv4_block1_0_
 bn[0][0]',
                                 )                                 'conv4_block1_3_
 bn[0][0]']

 conv4_block1_out (Activation)   (None, 32, 32, 1024  0           ['conv4_block1_ad
 d[0][0]']
                                 )

 conv4_block2_1_conv (Conv2D)    (None, 32, 32, 256)  262400      ['conv4_block1_ou
 t[0][0]']
```

```
 conv4_block2_1_bn (BatchNormal   (None, 32, 32, 256)   1024        ['conv4_block2_1_
 conv[0][0]']
  ization)

 conv4_block2_1_relu (Activatio   (None, 32, 32, 256)   0           ['conv4_block2_1_
 bn[0][0]']
  n)

 conv4_block2_2_conv (Conv2D)     (None, 32, 32, 256)   590080      ['conv4_block2_1_
 relu[0][0]']

 conv4_block2_2_bn (BatchNormal   (None, 32, 32, 256)   1024        ['conv4_block2_2_
 conv[0][0]']
  ization)

 conv4_block2_2_relu (Activatio   (None, 32, 32, 256)   0           ['conv4_block2_2_
 bn[0][0]']
  n)

 conv4_block2_3_conv (Conv2D)     (None, 32, 32, 1024   263168      ['conv4_block2_2_
 relu[0][0]']
                                  )

 conv4_block2_3_bn (BatchNormal   (None, 32, 32, 1024   4096        ['conv4_block2_3_
 conv[0][0]']
  ization)                        )

 conv4_block2_add (Add)           (None, 32, 32, 1024   0           ['conv4_block1_ou
 t[0][0]',
                                  )                                  'conv4_block2_3_
 bn[0][0]']

 conv4_block2_out (Activation)    (None, 32, 32, 1024   0           ['conv4_block2_ad
 d[0][0]']
                                  )

 conv4_block3_1_conv (Conv2D)     (None, 32, 32, 256)   262400      ['conv4_block2_ou
 t[0][0]']

 conv4_block3_1_bn (BatchNormal   (None, 32, 32, 256)   1024        ['conv4_block3_1_
 conv[0][0]']
  ization)

 conv4_block3_1_relu (Activatio   (None, 32, 32, 256)   0           ['conv4_block3_1_
 bn[0][0]']
  n)

 conv4_block3_2_conv (Conv2D)     (None, 32, 32, 256)   590080      ['conv4_block3_1_
 relu[0][0]']

 conv4_block3_2_bn (BatchNormal   (None, 32, 32, 256)   1024        ['conv4_block3_2_
 conv[0][0]']
  ization)

 conv4_block3_2_relu (Activatio   (None, 32, 32, 256)   0           ['conv4_block3_2_
 bn[0][0]']
  n)

 conv4_block3_3_conv (Conv2D)     (None, 32, 32, 1024   263168      ['conv4_block3_2_
 relu[0][0]']
```

```
                                    )

 conv4_block3_3_bn (BatchNormal  (None, 32, 32, 1024  4096        ['conv4_block3_3_
 ization)                        )                                conv[0][0]']

 conv4_block3_add (Add)          (None, 32, 32, 1024  0           ['conv4_block2_ou
                                                                  t[0][0]',
                                 )                                 'conv4_block3_3_
                                                                  bn[0][0]']

 conv4_block3_out (Activation)   (None, 32, 32, 1024  0           ['conv4_block3_ad
                                                                  d[0][0]']
                                 )

 conv4_block4_1_conv (Conv2D)    (None, 32, 32, 256)  262400      ['conv4_block3_ou
                                                                  t[0][0]']

 conv4_block4_1_bn (BatchNormal  (None, 32, 32, 256)  1024        ['conv4_block4_1_
 ization)                                                         conv[0][0]']

 conv4_block4_1_relu (Activatio  (None, 32, 32, 256)  0           ['conv4_block4_1_
 n)                                                               bn[0][0]']

 conv4_block4_2_conv (Conv2D)    (None, 32, 32, 256)  590080      ['conv4_block4_1_
                                                                  relu[0][0]']

 conv4_block4_2_bn (BatchNormal  (None, 32, 32, 256)  1024        ['conv4_block4_2_
 ization)                                                         conv[0][0]']

 conv4_block4_2_relu (Activatio  (None, 32, 32, 256)  0           ['conv4_block4_2_
 n)                                                               bn[0][0]']

 conv4_block4_3_conv (Conv2D)    (None, 32, 32, 1024  263168      ['conv4_block4_2_
                                 )                                relu[0][0]']

 conv4_block4_3_bn (BatchNormal  (None, 32, 32, 1024  4096        ['conv4_block4_3_
 ization)                        )                                conv[0][0]']

 conv4_block4_add (Add)          (None, 32, 32, 1024  0           ['conv4_block3_ou
                                                                  t[0][0]',
                                 )                                 'conv4_block4_3_
                                                                  bn[0][0]']

 conv4_block4_out (Activation)   (None, 32, 32, 1024  0           ['conv4_block4_ad
                                                                  d[0][0]']
                                 )

 conv4_block5_1_conv (Conv2D)    (None, 32, 32, 256)  262400      ['conv4_block4_ou
                                                                  t[0][0]']

 conv4_block5_1_bn (BatchNormal  (None, 32, 32, 256)  1024        ['conv4_block5_1_
 ization)                                                         conv[0][0]']
```

conv4_block5_1_relu (Activatio n)	(None, 32, 32, 256)	0	['conv4_block5_1_bn[0][0]']
conv4_block5_2_conv (Conv2D)	(None, 32, 32, 256)	590080	['conv4_block5_1_relu[0][0]']
conv4_block5_2_bn (BatchNormal ization)	(None, 32, 32, 256)	1024	['conv4_block5_2_conv[0][0]']
conv4_block5_2_relu (Activatio n)	(None, 32, 32, 256)	0	['conv4_block5_2_bn[0][0]']
conv4_block5_3_conv (Conv2D)	(None, 32, 32, 1024)	263168	['conv4_block5_2_relu[0][0]']
conv4_block5_3_bn (BatchNormal ization)	(None, 32, 32, 1024)	4096	['conv4_block5_3_conv[0][0]']
conv4_block5_add (Add)	(None, 32, 32, 1024)	0	['conv4_block4_out[0][0]', 'conv4_block5_3_bn[0][0]']
conv4_block5_out (Activation)	(None, 32, 32, 1024)	0	['conv4_block5_add[0][0]']
conv4_block6_1_conv (Conv2D)	(None, 32, 32, 256)	262400	['conv4_block5_out[0][0]']
conv4_block6_1_bn (BatchNormal ization)	(None, 32, 32, 256)	1024	['conv4_block6_1_conv[0][0]']
conv4_block6_1_relu (Activatio n)	(None, 32, 32, 256)	0	['conv4_block6_1_bn[0][0]']
conv4_block6_2_conv (Conv2D)	(None, 32, 32, 256)	590080	['conv4_block6_1_relu[0][0]']
conv4_block6_2_bn (BatchNormal ization)	(None, 32, 32, 256)	1024	['conv4_block6_2_conv[0][0]']
conv4_block6_2_relu (Activatio n)	(None, 32, 32, 256)	0	['conv4_block6_2_bn[0][0]']
conv4_block6_3_conv (Conv2D)	(None, 32, 32, 1024)	263168	['conv4_block6_2_relu[0][0]']
conv4_block6_3_bn (BatchNormal ization)	(None, 32, 32, 1024)	4096	['conv4_block6_3_conv[0][0]']

conv4_block6_add (Add)	(None, 32, 32, 1024	0	['conv4_block5_ou
t[0][0]',			
	)		'conv4_block6_3_
bn[0][0]']			
conv4_block6_out (Activation)	(None, 32, 32, 1024	0	['conv4_block6_ad
d[0][0]']			
	)		
average_pooling2d (AveragePool	(None, 1, 1, 1024)	0	['conv4_block6_ou
t[0][0]']			
ing2D)			
conv2d (Conv2D)	(None, 1, 1, 256)	262144	['average_pooling
2d[0][0]']			
batch_normalization (BatchNorm	(None, 1, 1, 256)	1024	['conv2d[0][0]']
alization)			
conv2d_1 (Conv2D)	(None, 32, 32, 256)	262144	['conv4_block6_ou
t[0][0]']			
conv2d_2 (Conv2D)	(None, 32, 32, 256)	2359296	['conv4_block6_ou
t[0][0]']			
conv2d_3 (Conv2D)	(None, 32, 32, 256)	2359296	['conv4_block6_ou
t[0][0]']			
conv2d_4 (Conv2D)	(None, 32, 32, 256)	2359296	['conv4_block6_ou
t[0][0]']			
activation (Activation)	(None, 1, 1, 256)	0	['batch_normaliza
tion[0][0]']			
batch_normalization_1 (BatchNo	(None, 32, 32, 256)	1024	['conv2d_1[0]
[0]']			
rmalization)			
batch_normalization_2 (BatchNo	(None, 32, 32, 256)	1024	['conv2d_2[0]
[0]']			
rmalization)			
batch_normalization_3 (BatchNo	(None, 32, 32, 256)	1024	['conv2d_3[0]
[0]']			
rmalization)			
batch_normalization_4 (BatchNo	(None, 32, 32, 256)	1024	['conv2d_4[0]
[0]']			
rmalization)			
up_sampling2d (UpSampling2D)	(None, 32, 32, 256)	0	['activation[0]
[0]']			
activation_1 (Activation)	(None, 32, 32, 256)	0	['batch_normaliza
tion_1[0][0]']			
activation_2 (Activation)	(None, 32, 32, 256)	0	['batch_normaliza
tion_2[0][0]']			
activation_3 (Activation)	(None, 32, 32, 256)	0	['batch_normaliza

```
tion_3[0][0]']

 activation_4 (Activation)      (None, 32, 32, 256)  0          ['batch_normaliza
tion_4[0][0]']

 concatenate (Concatenate)      (None, 32, 32, 1280  0          ['up_sampling2d
[0][0]',
                                )                                'activation_1[0]
[0]',
                                                                 'activation_2[0]
[0]',
                                                                 'activation_3[0]
[0]',
                                                                 'activation_4[0]
[0]']

 conv2d_5 (Conv2D)              (None, 32, 32, 256)  327680     ['concatenate[0]
[0]']

 batch_normalization_5 (BatchNo  (None, 32, 32, 256)  1024      ['conv2d_5[0]
[0]']
 rmalization)

 conv2d_6 (Conv2D)              (None, 128, 128, 48  12288      ['conv2_block2_ou
t[0][0]']
                                )

 activation_5 (Activation)      (None, 32, 32, 256)  0          ['batch_normaliza
tion_5[0][0]']

 batch_normalization_6 (BatchNo  (None, 128, 128, 48  192       ['conv2d_6[0]
[0]']
 rmalization)                   )

 up_sampling2d_1 (UpSampling2D)  (None, 128, 128, 25  0         ['activation_5[0]
[0]']
                                6)

 activation_6 (Activation)      (None, 128, 128, 48  0          ['batch_normaliza
tion_6[0][0]']
                                )

 concatenate_1 (Concatenate)    (None, 128, 128, 30  0          ['up_sampling2d_1
[0][0]',
                                4)                               'activation_6[0]
[0]']

 global_average_pooling2d (Glob  (None, 304)         0          ['concatenate_1
[0][0]']
 alAveragePooling2D)

 reshape (Reshape)              (None, 1, 1, 304)    0          ['global_average_
pooling2d[0][0]'
                                                                 ]

 dense (Dense)                  (None, 1, 1, 38)     11552      ['reshape[0][0]']

 dense_1 (Dense)                (None, 1, 1, 304)    11552      ['dense[0][0]']

 tf.math.multiply (TFOpLambda)  (None, 128, 128, 30  0          ['concatenate_1
[0][0]',
```

Layer (type)	Output Shape	Param #	Connected to
	4)		'dense_1[0][0]']
conv2d_7 (Conv2D)	(None, 128, 128, 25 6)	700416	['tf.math.multipl y[0][0]']
batch_normalization_7 (BatchNo rmalization)	(None, 128, 128, 25 6)	1024	['conv2d_7[0] [0]']
activation_7 (Activation)	(None, 128, 128, 25 6)	0	['batch_normaliza tion_7[0][0]']
conv2d_8 (Conv2D)	(None, 128, 128, 25 6)	589824	['activation_7[0] [0]']
batch_normalization_8 (BatchNo rmalization)	(None, 128, 128, 25 6)	1024	['conv2d_8[0] [0]']
activation_8 (Activation)	(None, 128, 128, 25 6)	0	['batch_normaliza tion_8[0][0]']
global_average_pooling2d_1 (Gl obalAveragePooling2D)	(None, 256)	0	['activation_8[0] [0]']
reshape_1 (Reshape)	(None, 1, 1, 256)	0	['global_average_ pooling2d_1[0][0]']
dense_2 (Dense)	(None, 1, 1, 32)	8192	['reshape_1[0] [0]']
dense_3 (Dense)	(None, 1, 1, 256)	8192	['dense_2[0][0]']
tf.math.multiply_1 (TFOpLambda)	(None, 128, 128, 25 6)	0	['activation_8[0] [0]', 'dense_3[0][0]']
up_sampling2d_2 (UpSampling2D)	(None, 512, 512, 25 6)	0	['tf.math.multipl y_1[0][0]']
conv2d_9 (Conv2D)	(None, 512, 512, 1)	257	['up_sampling2d_2 [0][0]']
activation_9 (Activation)	(None, 512, 512, 1)	0	['conv2d_9[0] [0]']

```
==================================================================================
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Total params: 17,869,697
Trainable params: 17,834,913
Non-trainable params: 34,784
_____
_____
```