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Model: "multi_input_model_v2"


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 Layer (type)                    Output Shape         Param #    Connected to
==================================================================================================
 cnn_input (InputLayer)          [(None, 256, 256, 1  0          []
                                 )]

 conv2d_20 (Conv2D)              (None, 256, 256, 32  320        ['cnn_input[0][0]']
                                 )

 activation_37 (Activation)      (None, 256, 256, 32  0          ['conv2d_20[0][0]']
                                 )

 batch_normalization_32 (BatchN  (None, 256, 256, 32  128        ['activation_37[0][0]']
 ormalization)                   )

 max_pooling2d_20 (MaxPooling2D  (None, 128, 128, 32  0          ['batch_normalization_32[0][0]']
 )                               )

 conv2d_21 (Conv2D)              (None, 128, 128, 32  9248       ['max_pooling2d_20[0][0]']
                                 )

 activation_38 (Activation)      (None, 128, 128, 32  0          ['conv2d_21[0][0]']
                                 )

 batch_normalization_33 (BatchN  (None, 128, 128, 32  128        ['activation_38[0][0]']
 ormalization)                   )

 max_pooling2d_21 (MaxPooling2D  (None, 64, 64, 32)   0          ['batch_normalization_33[0][0]']
 )

 conv2d_22 (Conv2D)              (None, 64, 64, 64)   18496      ['max_pooling2d_21[0][0]']

 activation_39 (Activation)      (None, 64, 64, 64)   0          ['conv2d_22[0][0]']

 batch_normalization_34 (BatchN  (None, 64, 64, 64)   256        ['activation_39[0][0]']
 ormalization)

 max_pooling2d_22 (MaxPooling2D  (None, 32, 32, 64)   0          ['batch_normalization_34[0][0]']
 )

 conv2d_23 (Conv2D)              (None, 32, 32, 64)   36928      ['max_pooling2d_22[0][0]']

 activation_40 (Activation)      (None, 32, 32, 64)   0          ['conv2d_23[0][0]']

 batch_normalization_35 (BatchN  (None, 32, 32, 64)   256        ['activation_40[0][0]']
 ormalization)

 max_pooling2d_23 (MaxPooling2D  (None, 16, 16, 64)   0          ['batch_normalization_35[0][0]']
 )

 flatten_5 (Flatten)             (None, 16384)        0          ['max_pooling2d_23[0][0]']

 dense_54 (Dense)                (None, 128)          2097280    ['flatten_5[0][0]']

 activation_41 (Activation)      (None, 128)          0          ['dense_54[0][0]']

 batch_normalization_36 (BatchN  (None, 128)          512        ['activation_41[0][0]']
 ormalization)

 dropout_12 (Dropout)            (None, 128)          0          ['batch_normalization_36[0][0]']

 dense_55 (Dense)                (None, 64)           8256       ['dropout_12[0][0]']

 activation_42 (Activation)      (None, 64)           0          ['dense_55[0][0]']

 batch_normalization_37 (BatchN  (None, 64)           256        ['activation_42[0][0]']
 ormalization)

 dropout_13 (Dropout)            (None, 64)           0          ['batch_normalization_37[0][0]']
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dense_56 (Dense)	(None, 32)	2080	['dropout_13[0][0]']
activation_43 (Activation)	(None, 32)	0	['dense_56[0][0]']
batch_normalization_38 (BatchN ormalization)	(None, 32)	128	['activation_43[0][0]']
dropout_14 (Dropout)	(None, 32)	0	['batch_normalization_38[0][0]']
dense_57 (Dense)	(None, 16)	528	['dropout_14[0][0]']
activation_44 (Activation)	(None, 16)	0	['dense_57[0][0]']
batch_normalization_39 (BatchN ormalization)	(None, 16)	64	['activation_44[0][0]']
mlp_input (InputLayer)	[(None, 4)]	0	[]
dropout_15 (Dropout)	(None, 16)	0	['batch_normalization_39[0][0]']
dense_52 (Dense)	(None, 8)	40	['mlp_input[0][0]']
dense_58 (Dense)	(None, 4)	68	['dropout_15[0][0]']
dense_53 (Dense)	(None, 4)	36	['dense_52[0][0]']
activation_45 (Activation)	(None, 4)	0	['dense_58[0][0]']
concatenate_5 (Concatenate)	(None, 8)	0	['dense_53[0][0]', 'activation_45[0][0]']
dense_59 (Dense)	(None, 128)	1152	['concatenate_5[0][0]']
dense_60 (Dense)	(None, 64)	8256	['dense_59[0][0]']
dense_61 (Dense)	(None, 32)	2080	['dense_60[0][0]']
class_output (Dense)	(None, 15)	495	['dense_61[0][0]']

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Total params: 2,186,991
Trainable params: 2,186,127
Non-trainable params: 864