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from keras.models import Sequential
from keras.layers import Conv2D, MaxPooling2D
from keras.layers import Activation, Dropout, Flatten, Dense

class KerasModel:

    def get_model(self, img_width, img_height):
        model = Sequential()
        model.add(Conv2D(32, (3, 3), input_shape=(3,img_width, img_height)))
        model.add(Activation('relu'))
        model.add(MaxPooling2D(pool_size=(2, 2)))

        model.add(Conv2D(32, (3, 3)))
        model.add(Activation('relu'))
        model.add(MaxPooling2D(pool_size=(2, 2)))
        model.add(Dropout(0.35))

        model.add(Conv2D(64, (3, 3)))
        model.add(Activation('relu'))
        model.add(MaxPooling2D(pool_size=(2, 2)))
        model.add(Dropout(0.35))

        model.add(Conv2D(128, (3, 3)))
        model.add(Activation('relu'))
        model.add(MaxPooling2D(pool_size=(2, 2)))
        model.add(Dropout(0.35))

        model.add(Conv2D(256, (3, 3)))
        model.add(Activation('relu'))
        model.add(MaxPooling2D(pool_size=(2, 2)))
        model.add(Dropout(0.35))
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model.add(Conv2D(512, (3, 3)))  
model.add(Activation('relu'))  
model.add(MaxPooling2D(pool_size=(2, 2)))  
model.add(Dropout(0.35))  
  
model.add(Flatten())  
model.add(Dense(256))  
model.add(Activation('relu'))  
model.add(Dropout(0.5))  
model.add(Dense(1))  
model.add(Activation('softmax'))  
return model
```