

Adding Dense Layers

Topic: AI-powered Nutrition Analyzer for Fitness Enthusiasts

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Adding Dense Layers

- A dense layer is a deeply connected neural network layer. It is the most common and frequently used layer.
- The number of neurons in the Dense layer is the same as the number of classes in the training set. The neurons in the last Dense layer, use softmax activation to convert their outputs into respective probabilities.
- Understanding the model is a very important phase to properly use it for training and prediction purposes. Keras provides a simple method, and a summary to get the full information about the model and its layers.

```
Adding Dense Layers

[ ] model.add(Dense(units=128, activation='relu'))
    model.add(Dense(units=5, activation='softmax'))

▶ model.summary()
```

Model: "sequential_2"

Layer (type)	Output Shape	Param #
conv2d (Conv2D)	(None, 62, 62, 32)	896
max_pooling2d (MaxPooling2D)	(None, 31, 31, 32)	0
conv2d_1 (Conv2D)	(None, 29, 29, 32)	9248
max_pooling2d_1 (MaxPooling2D)	(None, 14, 14, 32)	0
flatten (Flatten)	(None, 6272)	0
dense (Dense)	(None, 128)	802944
dense_1 (Dense)	(None, 5)	645

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Total params: 813,733
Trainable params: 813,733
Non-trainable params: 0