## M

*Example*: A rank-3 tensor with shape 3x2x2 and dtype float32:

[[[1.0 , 2.0 ],

[3.0 , 4.0 ]],

[[5.0 , 6.0 ],

[7.0 , 8.0 ]],

[[9.0 , 10.0],

[11.0, 12.0]]]

**Model**

A function that maps inputs to predictions. A deep neural network is a type of model that has a stack of functions, usually called ***layers***. Some of those layers can have parameters that are automatically learned during training.

**Layer**

A single function that maps an input to an output. Usually ***models*** are a stack of several layers. Common layers include: Dense, Convolution, DepthwiseConvolution, MaxPooling etc.

**Activations**

An activation is the ***tensor*** output of an intermediate ***layer*** of a ***model***.

**Classifier**

A type of ***model*** that can determine which ***class*** an input belongs to. For example, a model that takes an *image* and detects a *cat* in the image is a classifier.

The process of automatically updating ***parameters (weights)*** of a model. ***Models*** are typically shown lots of examples of inputs & labels during training and using an ***optimizer***, update weights to reduce a ***loss*** (see below)dsdsdko**Epochs**

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The percentage of correct class predictions a ***model*** makes over some inputs.

**One-hot**