



Slide-7-Convnets-in-TensorFlow

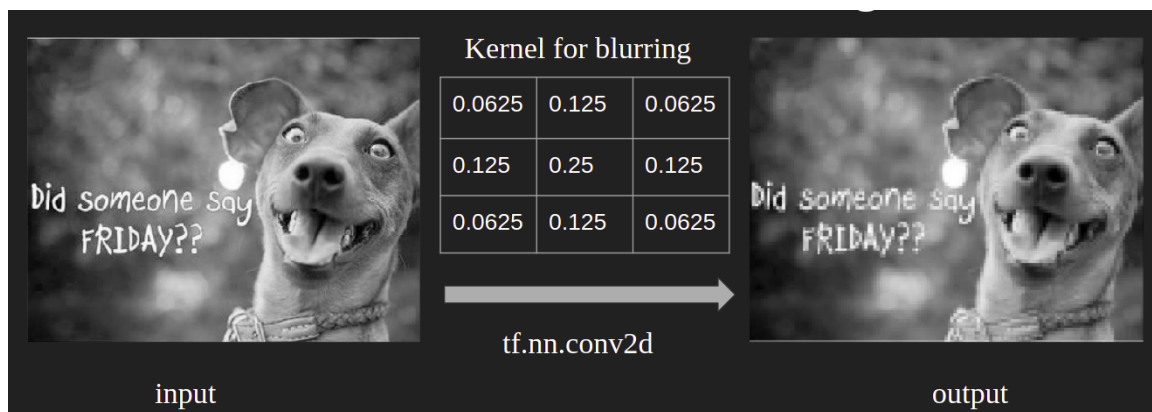
Created @Apr 13, 2021 10:06 AM

Understanding the convolutions

▼ Intuitive of convolution in math?

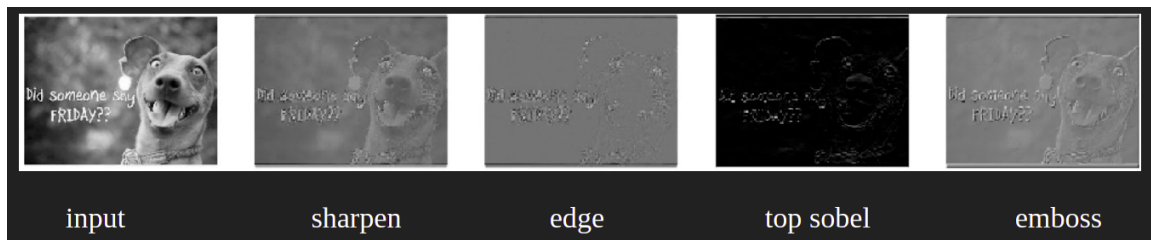
a function derived from two given functions by integration that expresses how the shape of one is modified by the other

▼ What happen if convol the kernel without training?



▼ List some basic kernel?

- sharpen
- edge
- top sobel
- emboss



▼ The main point of kernel in Deep Learning?

We try to **learn** the parameters of kernels \Rightarrow don't hard code the kernel

ConvNet with MNIST and tf.layers

▼ The formula for calculate dimension output?

$$(W - F + 2P) / S + 1$$

W: input width /depth
P: padding

F: filter width/depth
S: stride

▼ Some popular layers we use for DL?

- tf.layers.conv2d
- tf.layers.max_pooling2d
- tf.layers.dense