Inside Convolutional Layers

**Example**

![Image of an example](image)

- **Input Layer**
- **Filters**
  - Filter 1
  - Filter 2
  - Filter 3
  - Filter 4

Each of these sets of nodes are called feature maps or activation maps.

**Convolutional Layer**

If we visualize each feature map, we see that each of them looks like the filtered image.
Color images:

Just like grayscale but 3D. Depth width height

Depth → RGB Channel.

So, the filter has to be 3D, too. I.e., three 2D filters.

Stacking filtered images:

We can take the four filtered images above, stack them, and use them as input to another convolutional layer.

Similar to dense layer, we have weights, biases, and loss functions.