

Custom Layer

$$\text{Learnable_Coord} = \frac{(\text{Coord} \cdot W)}{\text{img_size}}$$

Initialization:

Coord \Rightarrow random generate coords

dim $\langle \# \text{neurons}, 1, 1, 2 \rangle$

$W \Rightarrow \text{tf.ones} [\# \text{neurons}, 1, 1, 2]$

for each coordinates,
we file:

$\langle \# \text{neurons}, \text{img_size}, \text{img_size}, 2 \rangle$

De-Coord Conv
(Pre-trained & Freeze)

generate one
hot images

