

ADAM Algorithm

gradient descent

$$w_j = w_j - \alpha \frac{\partial J(\vec{w}, b)}{\partial w_j}$$

Adam: Adaptive Movement Estimation

model.compile

(optimizer = tf.keras.optimizers.Adam
(learning_rate = $1e^{-3}$),

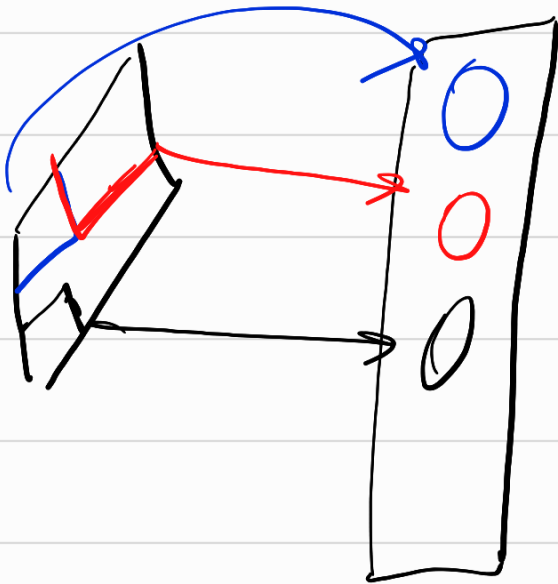
----- \uparrow -----
 $\alpha = 10^{-3}$
0.001

Additional Layer Types

Dense layer

→ neuron output is
function of all activation
output of previous layer

Convolutional Layer;



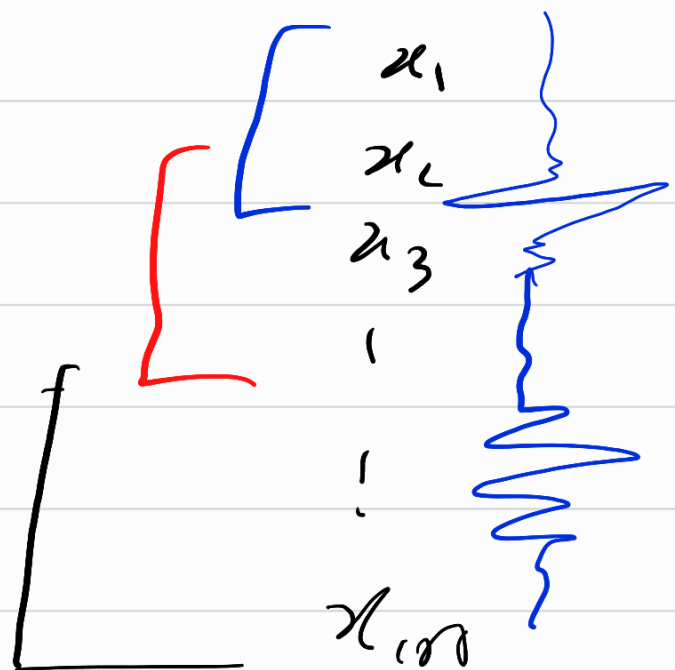
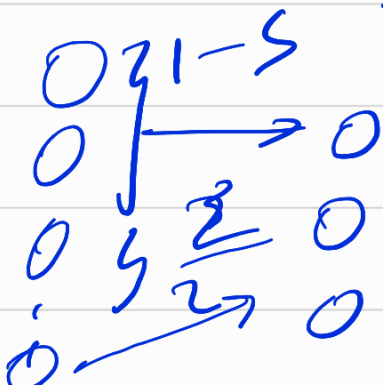
faster computation
less prone to
overfitting

multiple \rightarrow CNN
layers



9 units

3 units



\leftarrow sigmoid

