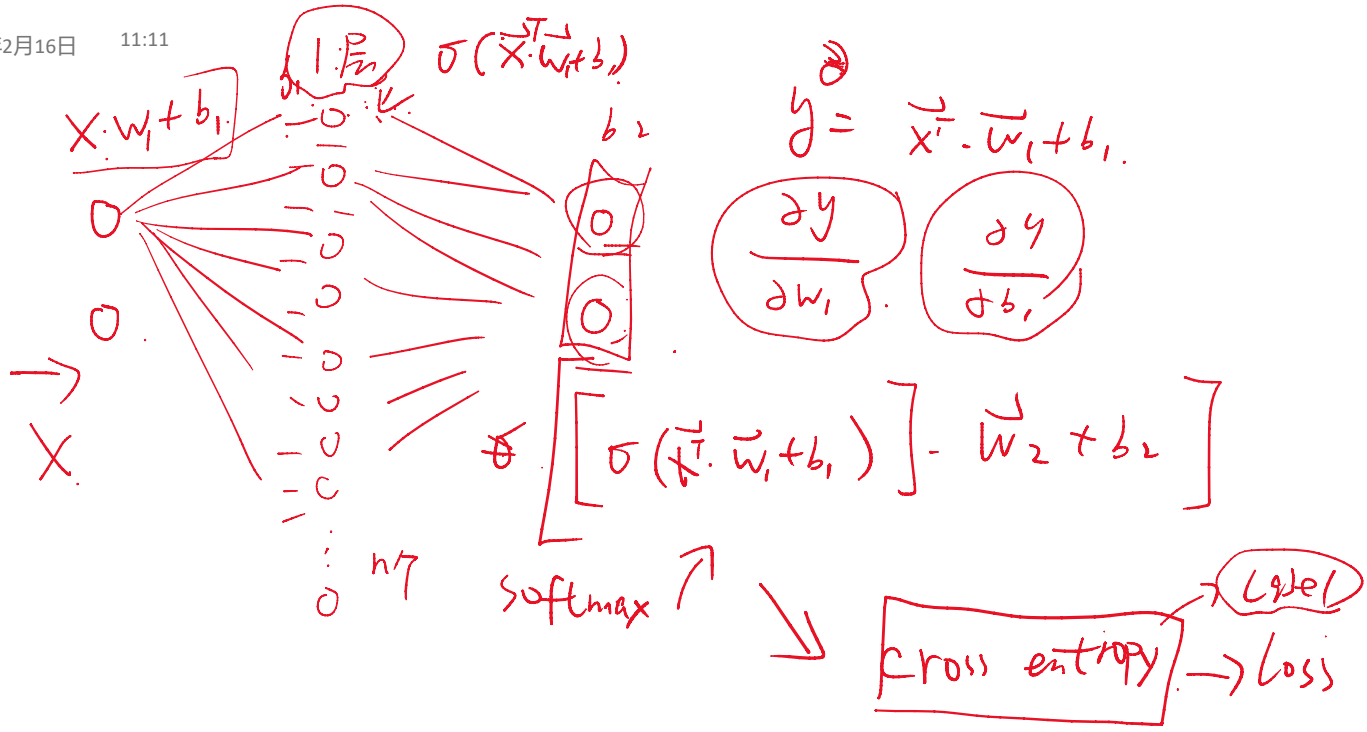
2020年2月16日 11:11



$$\left[\tanh(x)\right]' = 1 - \tanh^2 x$$

$$W := W - \alpha \cdot \frac{\partial J}{\partial W}$$

$J \rightarrow J + \frac{1}{2}\Sigma' \|W\|^2$

$$\frac{\partial J}{\partial W} \rightarrow + \Sigma'(W) \cdot W$$

L2 regularization

$$W := W - \alpha \left(\frac{\partial J}{\partial W} + \lambda \cdot W \right)$$

$$
\begin{aligned}
W &= W - lr\cdot\left(\frac{\partial J}{\partial W} + \lambda\cdot W\right) \\
&= W\left(1 - lr\cdot\lambda\right) - lr\cdot\frac{\partial J}{\partial W}
\end{aligned}
$$