

Bài tập Computational Graph

Nhóm 15

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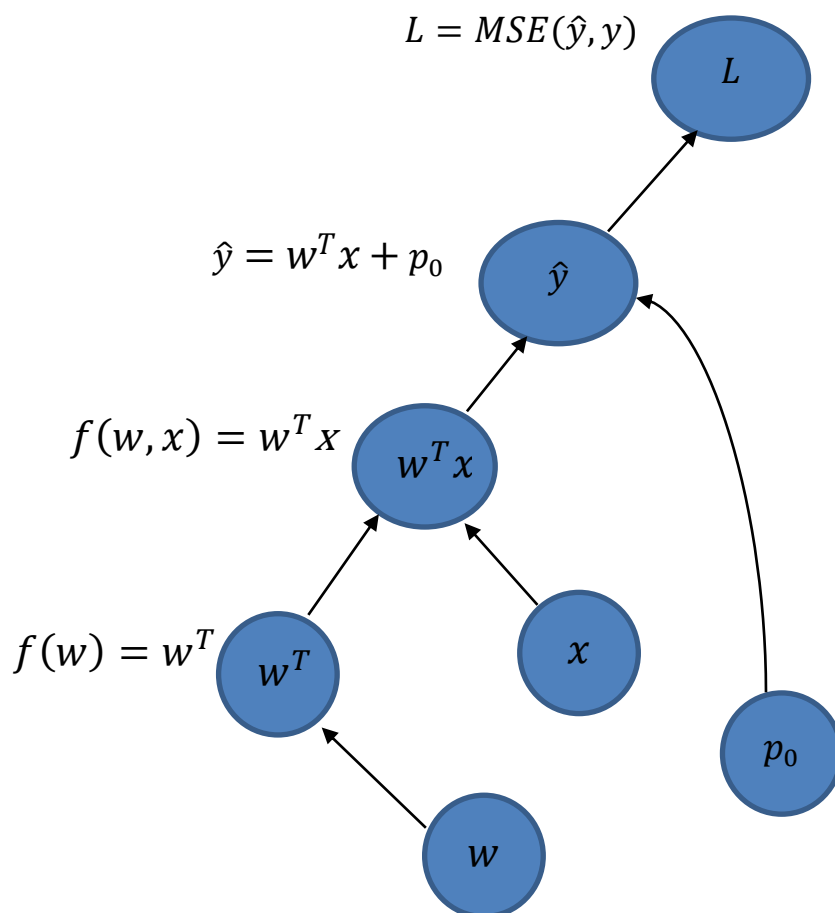
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Câu 1: Draw CG for $L = \text{MSE}(\hat{y}, y)$ of a prediction $\hat{y} = (w^T x + p_0)$ with respect to the true value y .



Câu 2:

$$- \quad w = \begin{pmatrix} \frac{4}{5} \\ -\frac{7}{5} \end{pmatrix} \Rightarrow w^T = \left(\frac{4}{5} \quad \frac{-7}{5} \right)$$

$$- \quad x = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

$$- \quad w^T x = \left(\frac{4}{5} \quad \frac{-7}{5} \right) * \begin{pmatrix} 1 \\ 1 \end{pmatrix} = \left(\frac{-3}{5} \right)$$

$$- \quad \hat{y} = w^T x + p_0 = \left(\frac{-3}{5} \right) + \frac{3}{5} = 0$$

$$- \quad L = (\hat{y} - y)^2 = (0 - 1)^2 = 1$$