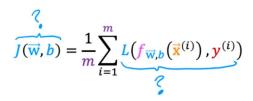
Congratulations! You passed!

Grade received 100% Latest Submission Grade 100% To pass 80% or higher

Go to next item

1/1 point

1.



In this lecture series, "cost" and "loss" have distinct meanings. Which one applies to a single training example?

Loss

In these lectures, loss is calculated on a single training example. It is worth noting that this definition is not universal. Other lecture series may have a different definition.

- ☐ Cost
- ☐ Both Loss and Cost
- ☐ Neither Loss nor Cost

2.

1/1 point

Simplified loss function

$$L(f_{\overline{\mathbf{w}},b}(\mathbf{\vec{x}}^{(i)}), \mathbf{y}^{(i)}) = \begin{cases} -\log(f_{\overline{\mathbf{w}},b}(\mathbf{\vec{x}}^{(i)})) & \text{if } \mathbf{y}^{(i)} = 1\\ -\log(1 - f_{\overline{\mathbf{w}},b}(\mathbf{\vec{x}}^{(i)})) & \text{if } \mathbf{y}^{(i)} = 0 \end{cases}$$

$$L(f_{\overline{\mathbf{w}},b}(\mathbf{\vec{x}}^{(i)}), \mathbf{y}^{(i)}) = -\mathbf{y}^{(i)}\log(f_{\overline{\mathbf{w}},b}(\mathbf{\vec{x}}^{(i)})) - (1 - \mathbf{y}^{(i)})\log(1 - f_{\overline{\mathbf{w}},b}(\mathbf{\vec{x}}^{(i)}))$$

For the simplified loss function, if the label $y^{(i)}=0$, then what does this expression simplify to?

- $\bigcirc \log(1-f_{ec{\mathbf{w}},b}(\mathbf{x}^{(i)})) + log(1-f_{ec{\mathbf{w}},b}(\mathbf{x}^{(i)}))$
- $\bigcap \log(f_{\vec{w},b}(\mathbf{x}^{(i)}))$
- $\bigcirc -\log(1-f_{ec{\mathbf{w}},b}(\mathbf{x}^{(i)})) log(1-f_{ec{\mathbf{w}},b}(\mathbf{x}^{(i)}))$

✓ Correct

When $y^{(i)}=0$, the first term reduces to zero.