200 XP

Knowledge check

3 minutes

Check your knowledge

1. What is the difference between supervised learning and unsupervised learning?

- ○ Supervised learning requires human supervision, while unsupervised learning doesn't
- ○ Supervised learning always uses an optimizer, but unsupervised never does
- ◉ Supervised learning trains a model by comparing estimations to correct answers. The cost function for unsupervised learning doesn't need correct answers ✓

Correct.

2. What is the role of the cost function in supervised learning?

- ○ To maximize the cost so that the objective is reached.
- ◉ To calculate cost by comparing estimations to correct answers. ✓

Correct.

- ○ To update model parameters.

3. How does gradient descent know how to update parameters?

- ○ It compares costs for several combinations of parameters, and then selects the best option
- ○ It uses an internal understanding of the relationship between features and labels to make intelligent choices
- ◉ It uses calculus to estimate the slope of the cost function ✓

Correct. Once the slope it known, it's clear whether to make parameters smaller or larger.

4. Why are there many cost functions available?

- ○ A unique cost function is required for each processed currency or banking system
- ○ Because cost functions help models process data, and many model types are available
- ◉ Because different cost functions can arrive at different answers, and what is best depends on our goal. ✓

Correct.

5. Why is learning rate important?

- ○ It speeds up or slows down training
- ○ If too large or too small, it can prevent a model from being trained optimally
- ◉ Both options are correct ✓

Correct.

Next unit: Summary

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