Logistic Regression

Latest Submission Grade
80%
1.
Question 1

Suppose that you have trained a logistic regression classifier, and it outputs on a new example xxx a prediction hθ(x)h_\theta(x)hθ(x) = 0.2. This means (check all that apply):

1 / 1 point
Correct
2.
Question 2

Suppose you have the following training set, and fit a logistic regression classifier hθ(x)=g(θ0+θ1x1+θ2x2)h_\theta(x) = g(\theta_0 + \theta_1x_1 + \theta_2 x_2)hθ(x)=g(θ0+θ1x1 +θ2x2).

Which of the following are true? Check all that apply.

1 / 1 point
Correct
3.
Question 3

For logistic regression, the gradient is given by ∂∂θjJ(θ)=1m∑i=1m(hθ(x(i))−y(i))xj(i)\frac{\partial}{\partial \theta_j} J(\theta) =\frac{1}{m}\sum_{i=1}^m{ (h_\theta(x^{(i)}) - y^{(i)}) x_j^{(i)}}∂θj∂J(θ)=m1∑i=1m(hθ (x(i))−y(i))xj(i). Which of these is a correct gradient descent update for logistic regression with a learning rate of α\alphaα? Check all that apply.

0 / 1 point
Incorrect
4.
Question 4

Which of the following statements are true? Check all that apply.

1 / 1 point
Correct
5.
Question 5

Suppose you train a logistic classifier hθ(x)=g(θ0+θ1x1+θ2x2)h_\theta(x) = g(\theta_0 + \theta_1x_1 + \theta_2 x_2)hθ(x)=g(θ0+θ1x1+θ2x2). Suppose θ0=6,θ1=0,θ2=−1\theta_0 = 6, \theta_1 = 0, \theta_2 = -1θ0=6,θ1=0,θ2=−1. Which of the following figures represents the decision boundary found by your classifier?

1 / 1 point

Correct