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Shallow Neural Networks

Graded Assignment • 50 min

Due Jul 28, 11:59 PM PDT

00:04:20 remaining

If you don't submit before the timer runs out, your work will be automatically submitted for grading.

1. Which of the following are true? (Check all that apply.) 1 point

- [x] $W^{[1]}$ is a matrix with rows equal to the parameter vectors of the first layer.
- [ ] $w_3^{[4]}$ is the column vector of parameters of the fourth layer and third neuron.
- [ ] $w_3^{[4]}$ is the row vector of parameters of the fourth layer and third neuron.
- [x] $W^{[1]}$ is a matrix with rows equal to the transpose of the parameter vectors of the first layer.
- [ ] $w_3^{[4]}$ is the column vector of parameters of the third layer and fourth neuron.
- [ ] W_1 is a matrix with rows equal to the parameter vectors of the first layer.

2. The tanh activation is not always better than sigmoid activation function for hidden units because the mean of its output is closer to zero, and so it centers the data, making learning complex for the next layer. True/False? 1 point

- ○ True
- ◉ False

3. Which of these is a correct vectorized implementation of forward propagation for layer l, where $1 \leq l \leq L$? 1 point

- ○
  - $Z^{[l]} = W^{[l]} A^{[l]} + b^{[l]}$
  - $A^{[l+1]} = g^{[l+1]}(Z^{[l]})$