



EN.605.647.83.SP21 Neural Networks

Course Modules ...

Lectures and Quizzes

Review Test Submission: Quiz

10.1

Review Test Submission: Quiz 10.1

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Course	EN.605.647.81.SP21 Neural Networks
Test	Quiz 10.1
Started	3/31/21 6:39 PM
Submitted	3/31/21 6:40 PM
Due Date	4/6/21 11:59 PM
Status	Completed
Attempt Score	6 out of 8 points
Time Elapsed	0 minute
Instructions	Please complete this quiz after viewing recorded lecture 10.1 on the Boltzmann Machine.

Results Displayed Submitted Answers, Feedback, Incorrectly Answered Questions

Question 1

0 out of 2 points



The stochastic nature of the Boltzmann machine ultimately arises from the randomness of the weights.

Selected Answer: True

Response Incorrect. The randomness arises from the states of the nodes. Weights are modified or
Feedback: assigned and are based on node states, but they are not random.

Question 2

2 out of 2 points



The Boltzmann machine must use binary values for node states.

Selected Answer: False

Response Feedback: Correct. It's possible to devise a Boltzmann machine to use bipolar values.

Question 3

2 out of 2 points



The Boltzmann factor is ultimately a comparison between two network configurations that leads to an expression relating the change in energy to the probability that a node's state is 1.

Selected Answer: True

Response Feedback: Correct.

Question 4

2 out of 2 points



For a node in a Boltzmann Machine, the higher the temperature, the probability that a node's state is 1 approaches 1.

Selected Answer: False

Response Feedback: Correct.

Wednesday, March 31, 2021 6:40:05 PM EDT

← OK