

data





Module 3 - Recurrent Neural

Course > Networks (RNNs)

> Graded Review Questions > Graded Review Questions

Graded Review Questions

Instructions for Graded Review Questions

- 1. Time allowed: Unlimited
- We encourage you to go back and review the materials to find the right answer
- Please remember that the Review Questions are worth 50% of your final mark.
- 2. Attempts per question:
- One attempt For True/False questions
- Two attempts For any question other than True/False
- 3. Check your grades in the course at any time by clicking on the "Progress" tab

Review Question 1

1/1 point (graded)

What is a Recurrent Neural Network?

- A Neural Network that can recur to itself, and is proper for handling sequential data
- An infinite layered Neural Network which is proper for handling structured data
- A special kind of Neural Network to predict weather
- A markovian model to handle temporal data

You have used 1 of 2 attempts

Graded Review Questions | Graded Review Questions | DL0120EN Courseware | edX Submit ✓ Correct (1/1 point) Review Question 2 1/1 point (graded) What is NOT TRUE about RNNs? RNNs are VERY suitable for sequential data. RNNs need to keep track of states, which is computationally expensive. RNNs are very robust against vanishing gradient problem. You have used 1 of 2 attempts Submit ✓ Correct (1/1 point) **Review Question 3** 1/1 point (graded) What application(s) is(are) suitable for RNNs? Estimating temperatures from weather data Natural Language Processing

Video context retriever

Speech Recognition

• All of the above

You have used 1 of 2 attempts Submit ✓ Correct (1/1 point) **Review Question 4** 1/1 point (graded) Why are RNNs susceptible to issues with their gradients? Numerical computation of gradients can drive into instabilities Gradients can quickly drop and stabilize at near zero Propagation of errors due to the recurrent characteristic Gradients can grow exponentially • All of the above You have used 1 of 2 attempts Submit ✓ Correct (1/1 point) **Review Question 5** 1/1 point (graded) What is TRUE about LSTM gates? • The Read Gate in LSTM, determine how much old information to forget • The Write Gate in LSTM, reads data from the memory cell and sends that data back to the network.

- ullet The Forget Gate, in LSTM maintains or deletes data from the information cell. \checkmark
- The Read Gate in LSTM, is responsible for writing data into the memory cell.

Submit

You have used 1 of 2 attempts

✓ Correct (1/1 point)

© All Rights Reserved