

## ✔ Congratulations! You passed!

**Grade**  
received 100%

**Latest Submission**  
Grade 100%

**To pass 80% or**  
higher

**Go to next item**

**1. What is a Recurrent Neural Network?**

**1 / 1 point**

- ☒ 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
- ☒ **Correct**

**2. What is NOT TRUE about RNNs?**

**1 / 1 point**

- ☐ 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.
- ☒ **Correct**

**3. What application(s) is(are) suitable for RNNs?**

**1 / 1 point**

- ☐ Speech Recognition
- ☐ Natural Language Processing

- ☐ Video context retriever
- ☐ Estimating temperatures from weather data
- ☒ All of the above

☒ **Correct**

4. Why are RNNs susceptible to issues with their gradients?

1 / 1 point

- ☐ Gradients can grow exponentially
- ☐ Gradients can quickly drop and stabilize at near zero
- ☐ Propagation of errors due to the recurrent characteristic
- ☐ Numerical computation of gradients can drive into instabilities
- ☒ All of the above

☒ **Correct**

5. What is TRUE about LSTM gates?

1 / 1 point

- ☐ The Read Gate in LSTM, is responsible for writing data into the memory cell.
- ☐ The Write Gate in LSTM, reads data from the memory cell and sends that data back to the network.
- ☒ The Forget Gate, in LSTM maintains or deletes data from the information cell.
- ☐ The Read Gate in LSTM, determine how much old information to forget

☒ **Correct**