Recurrent Neural Networks

LATEST SUBMISSION GRADE
100%

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**