

How do you solve the exploding gradient problem in LSTM?

- ☐ a. Increasing the number of hidden units
- ☒ b. Gradient Clipping
- ☐ c. Increasing the number of time steps
- ☐ d. Gradient normalization



Which one of the following networks is the most susceptible to the vanishing gradient problem?

- ☒ a. RNN
- ☐ b. LSTM
- ☐ c. GRU
- ☐ d. Bi-directional LSTM



Choose the method with the worst reconstruction performance.

- ☐ a. Principal component analysis with 7 latent features
- ☐ b. Principal component analysis with 10 latent features
- ☒ c. A linear 3-layered autoencoder with the bottleneck layer having 5 units
- ☐ d. All are same



Which of the following sparse autoencoders is guaranteed to have zero reconstruction error on the training data?

- ☐ a. 28 input units- 18 hidden unites- 18 hidden units - 28 output units with sparsity parameter=0.10
- ☐ b. 28 input units- 28 hidden unites-28 output units with sparsity parameter=0.05
- ☒ c. 28 input units- 28 hidden unites-28 output units without any sparsity constraint ✓
- ☐ d. 28 input units- 20 hidden unites-28 output units without any sparsity constraint

Consider a convolution layer that accepts a volume of size $37 \times 37 \times 64$ (Height x Width x Features), having 30 3×3 filters with stride 2, and no zero-padding. What is the height of the output volume?

Answer:

17



The correct answer is: 18