

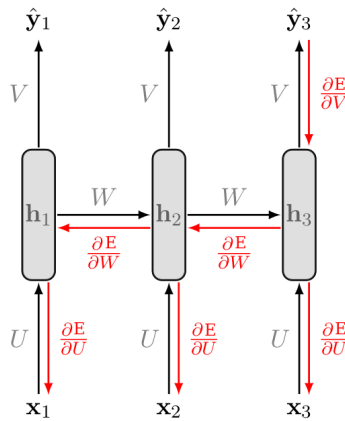
Scalable Machine Learning and Deep Learning - Review Questions 4

Deadline: Dec. 4, 2021

1. **1 point.** What's the vanishing problem in RNN?

2. **1 point.** Explain the impact of different gates in LSTM.

3. **1 point.** Assume the error of the following network is $E = E^{(1)} + E^{(2)}$, then compute the $\frac{\partial E}{\partial a}$.



4. **1 point.** Explain how to use a seq-to-seq model for language translation.

5. **1 point.** Briefly explain the attention and self-attention mechanisms.