5주차 머신러닝 발표

김찬원

Recurrent Neural Network

We can process a sequence of vectors **x** by applying a recurrence formula at every time step:

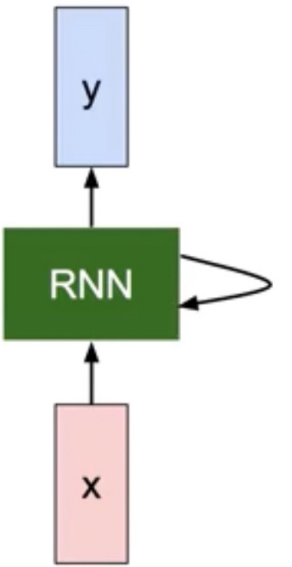
$$h_t = f_W(h_{t-1}, x_t)$$

new state

some function with parameters W

old state

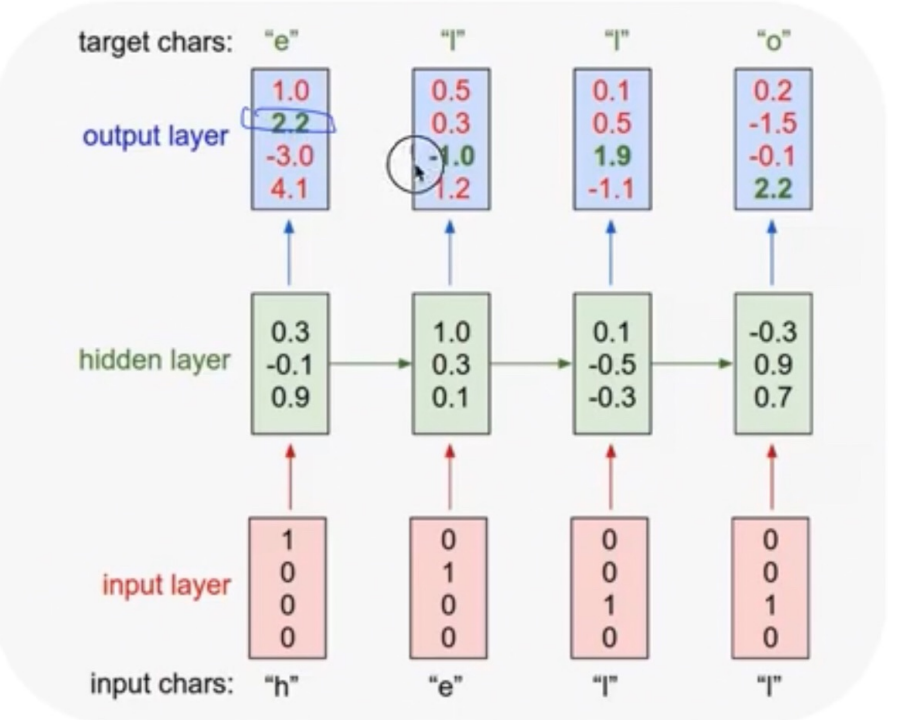
input vector at some time step



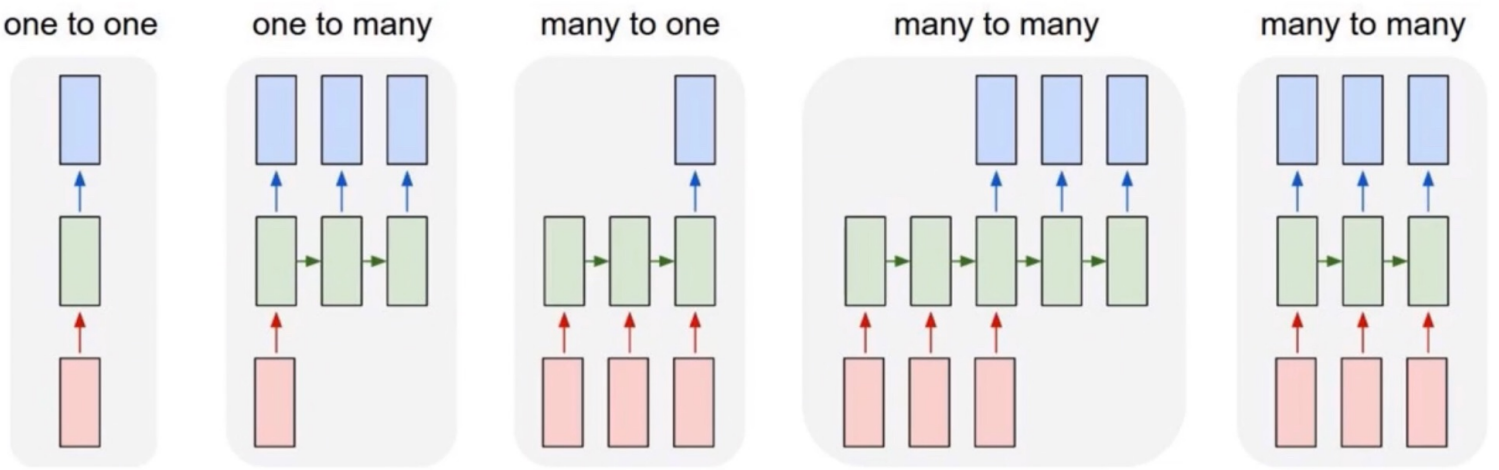
Character-level language model example

Vocabulary:
[h,e,l,o]

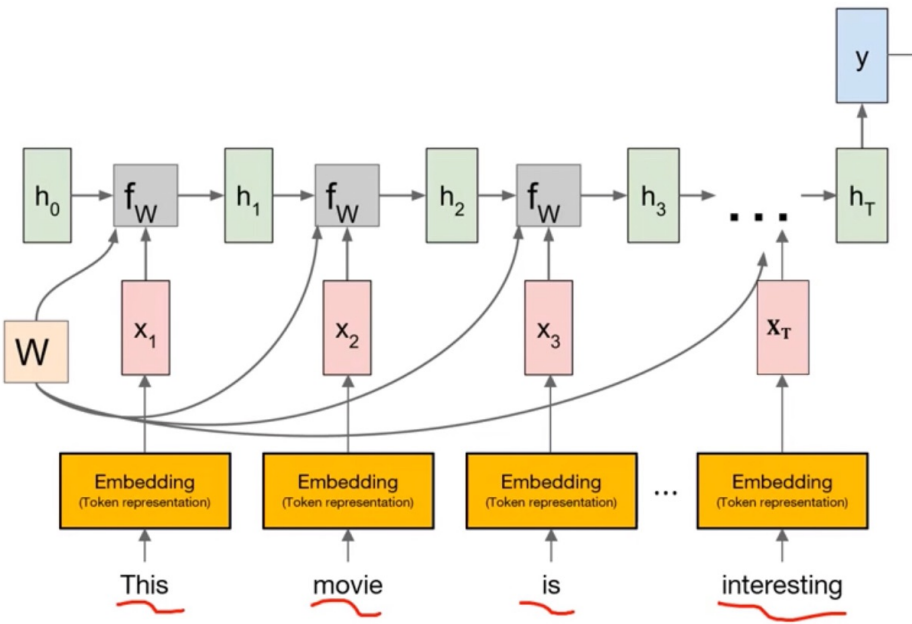
Example training sequence:
“hello”



Various usage of RNN



What is “many to one”?

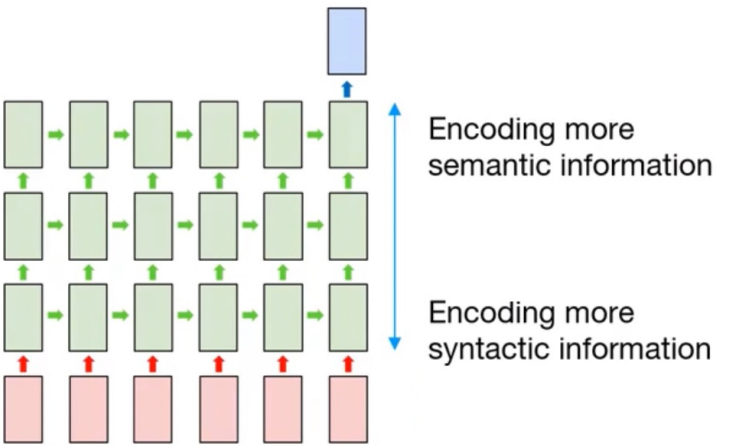


Depending on the task…

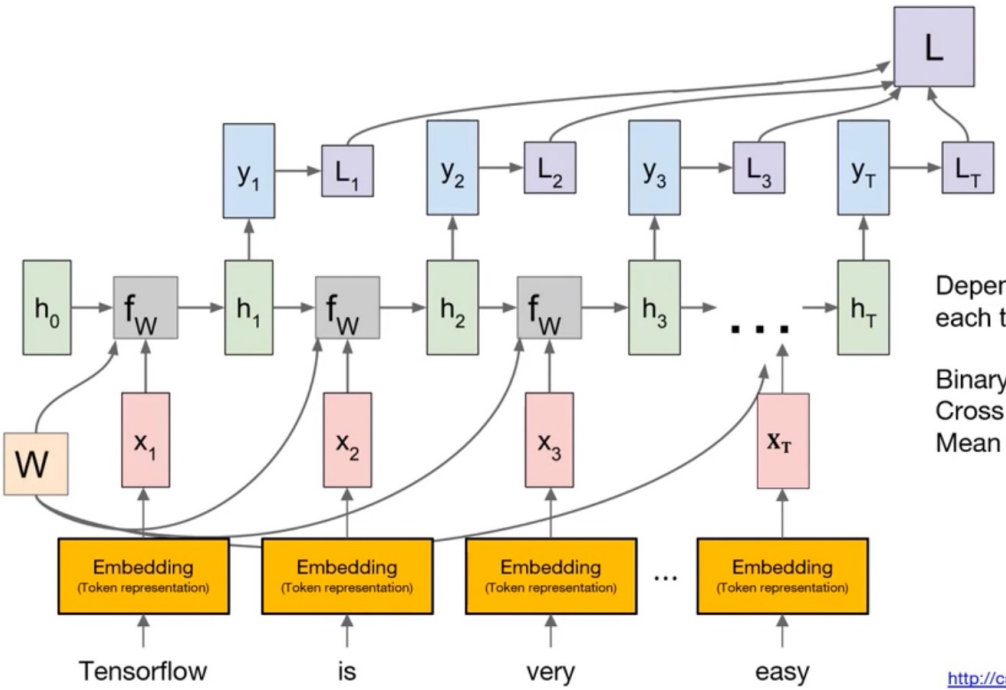
Binary entropy loss (binary classifier)
Cross entropy loss (softmax classifier)
Mean squared loss (regression)

What is “stacking”?

Besides, many works have shown that different layers of deep RNNs encode different types of information.



What is “many to many”?



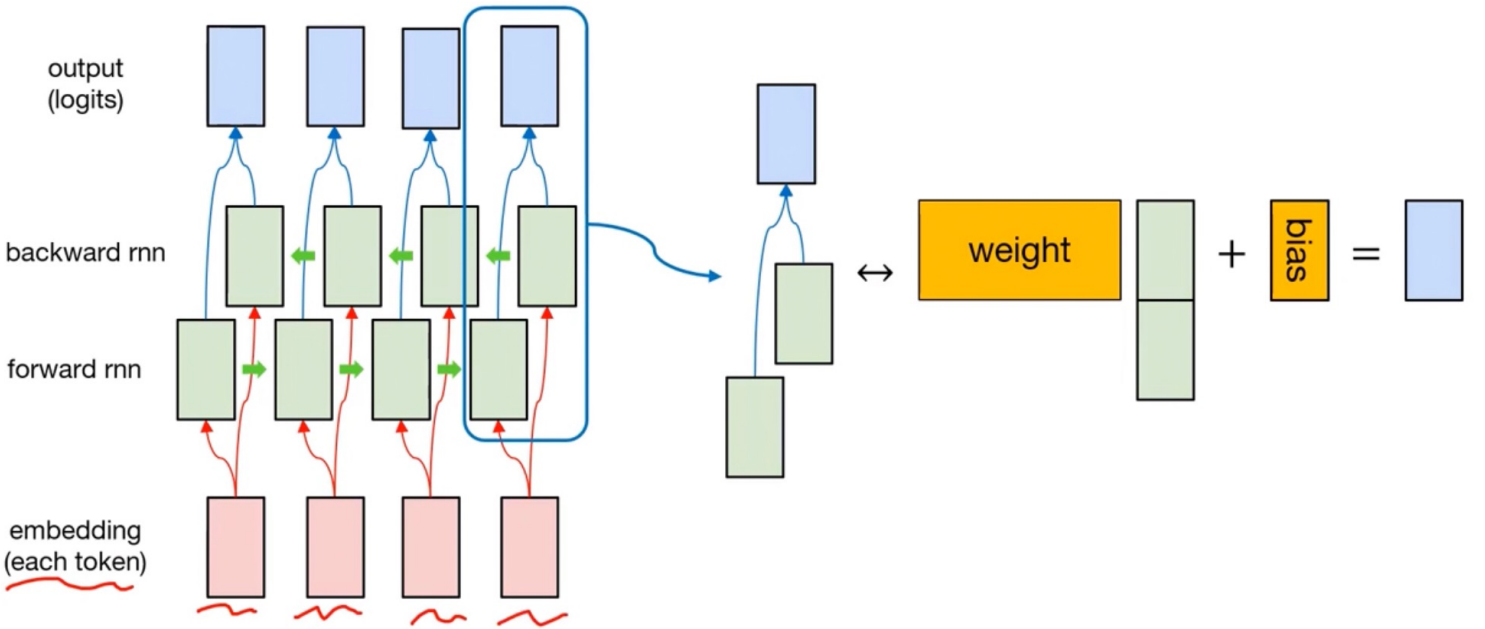
Depending on the task with regard to each time step…

Binary entropy loss (binary classifier)
Cross entropy loss (softmax classifier)
Mean squared loss (regression)

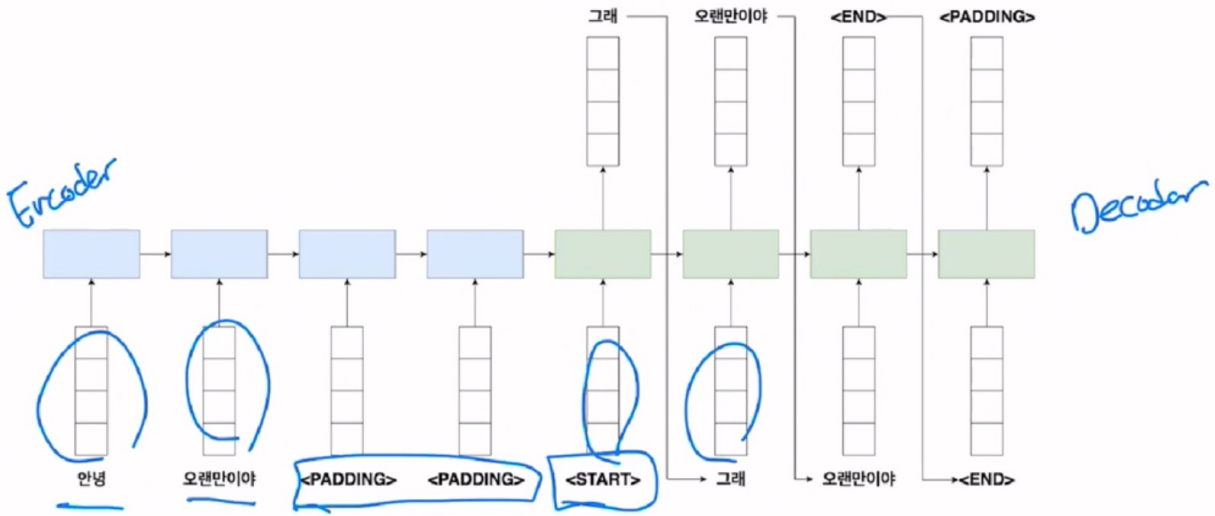
aka Sequence loss!

http://cs231n.stanford.edu/slides/2018/cs231n_2018_lecture10.pdf

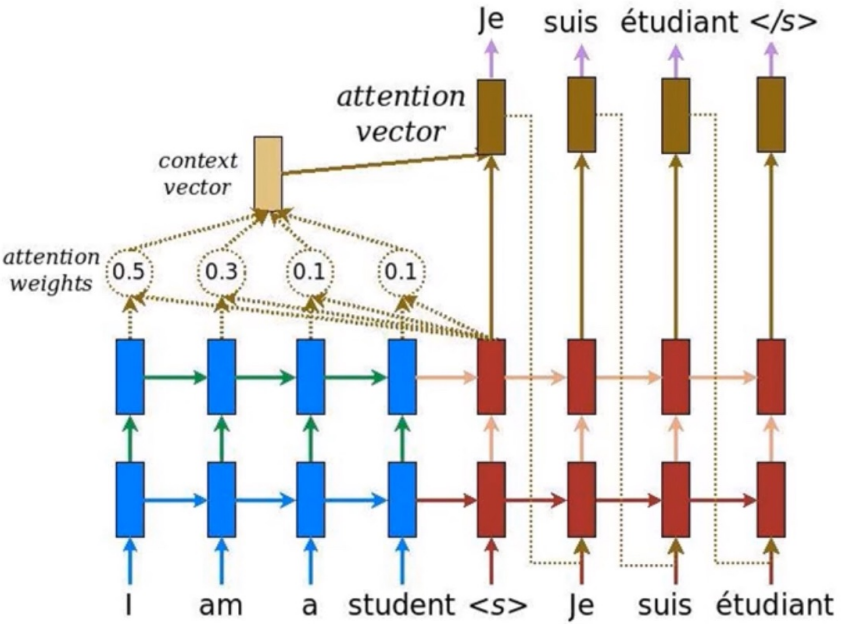
What is “bidirectional”?



Encoder-Decoder



What is Attention?



기온 예측 모델 만들기(Neural Weather Forecaster)

개요	평가기준표	제출	리뷰 결과

리뷰어 지정 전

리뷰#1 | -

프로젝트 평가 | 코드 리뷰 | 수강생 메모 | 리뷰 목록

리뷰	결과	리뷰일	리뷰어
리뷰 #1 (현재 리뷰)	리뷰어 지정 전	2023.11.07	-