

$$h_t = \tanh(W_1 h_{t-1} + W_2 x_t)$$

~~\hat{y}_t~~ ~~softmax~~

$$h_1 = \tanh(W_1 h_0 + W_2 x_1)$$

$$= \tanh(1 \times 0.75 + 2 \times 0.9)$$

$$= \tanh(2.55)$$

$$h_1 = 0.987 \quad \checkmark$$

$$h_2 = \tanh(W_1 h_1 + W_2 x_2)$$

$$h_2 = \tanh(1 \times 0.987 + 2 \times 0.9)$$

$$= \tanh(2.787)$$

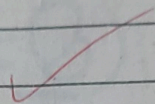
$$h_2 = 0.992 \quad \checkmark$$

$$h_3 = \tanh(w_1 h_2 + w_2 x_3)$$

$$= \tanh(1 \times 0.992 + 2 \times 0.9)$$

$$= \tanh(2.792)$$

$$h_3 = 0.992$$



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$$h_4 = \tanh(w_1 h_3 + w_2 x_4)$$

$$= \tanh(1 \times 0.992 + 2 \times 0.9)$$

$$= \tanh(2.792)$$

$$h_4 = 0.992$$

at last timestamp