$$P(s_i|s_{i-1}, x_1, \ldots, x_m) = \frac{\exp(\vec{w} \cdot \vec{\phi}(x_1, \cdots, x_m, i, s_{i-1}, s_i))}{\sum_{s' \in S} \exp(\vec{w} \cdot \vec{\phi}(x_1, \cdots, x_m, i, s_{i-1}, s'))}$$

Example:

1	2	3	4
The	dog	barks	loudly
DT	NN	VB	ADV

Let's check that $P(s_4 = \text{ADV}|s_3 = \text{VB}, \text{the,dog,barks,loudly}) > P(s_4 = \text{VB}|s_3 = \text{VB}, \text{the,dog,barks,loudly})$

$$P(s_4 = \text{ADV}|s_3 = \text{VB}, \text{the,dog,barks,loudly}) = \frac{\exp(\vec{w} \cdot \vec{\phi}(\text{the,dog,barks,loudly}, 4, \text{VB}, \text{ADV}))}{\sum_{s' \in S} \exp(\vec{w} \cdot \vec{\phi}(\text{the,dog,barks,loudly}, 4, \text{VB}, s'))}$$

$$P(s_4 = \text{VB}|s_3 = \text{VB}, \text{the,dog,barks,loudly}) = \frac{\exp(\vec{w} \cdot \vec{\phi}(\text{the,dog,barks,loudly}, 4, \text{VB}, \text{VB}))}{\sum_{s' \in S} \exp(\vec{w} \cdot \vec{\phi}(\text{the,dog,barks,loudly}, 4, \text{VB}, s'))}$$