

# Attention mechanism

- Encoder states are weighted to obtain the representation relevant to the decoder state:

$$v_j = \sum_{i=1}^I \alpha_{ij} h_i$$

- The weights are learnt and should find the most relevant encoder positions:

$$\alpha_{ij} = \frac{\exp(\text{sim}(h_i, s_{j-1}))}{\sum_{i'=1}^I \exp(\text{sim}(h_{i'}, s_{j-1}))}$$