

# Local attention

## 1. Find the most relevant position $a_j$ in the source

- Monotonic alignments:  $a_j = j$
- Predictive alignments:  $a_j = I \cdot \sigma(b^T \tanh(W s_j))$

## 2. Attend only positions within a window $[a_j - h; a_j + h]$

- Compute scores as usual
- Probably multiply by a Gaussian centered in  $a_j$

Luong et. al. Effective Approaches to Attention-based Neural Machine Translation, 2015.