

# Word Alignment

Input: bitext

Output: Je fais un bureau  
I am making a desk

Je vais le faire  
I am going to do it

target: English aligned to source: French

$\bar{F}$  = Eng words     $\bar{S}$  = French words

$\bar{a}$  = alignments

$a_i = j$  English word  $i$  aligns to Fr word  $j$

$\bar{S}$  = Je fais un bureau

$\bar{a}$  = 1 | 2 / 2

$\bar{t}$  = I am making a desk

$a_1 = 1$      $a_4 = 3$

$a_2 = 2$      $a_5 = 4$

$a_3 = 2$

Alignment model:  $P_{\theta}(\bar{F}, \bar{a} | \bar{S})$   
Unsupervised

generative

