

Semantic Slot Filling: CRF

Probabilistic graphical model:

- Conditional Random Field (CRF)

$$p(\text{tags}|\text{words}) = \dots$$

features

parameters Θ

Training:

$$p(\text{tags}|\text{words}) \rightarrow \max_{\Theta}$$

Inference:

$$\text{tags}^* = \operatorname{argmax} p(\text{tags}|\text{words})$$