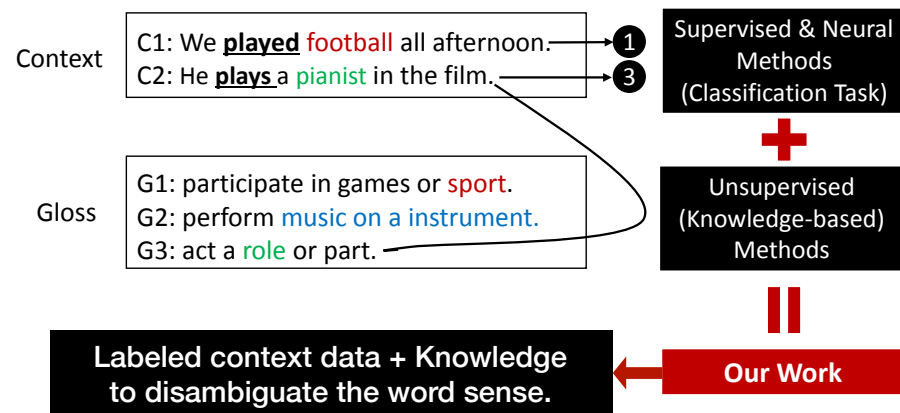
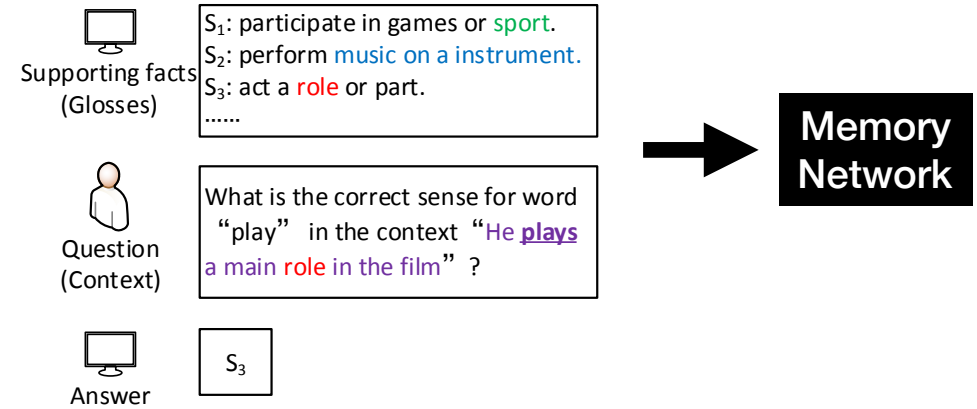


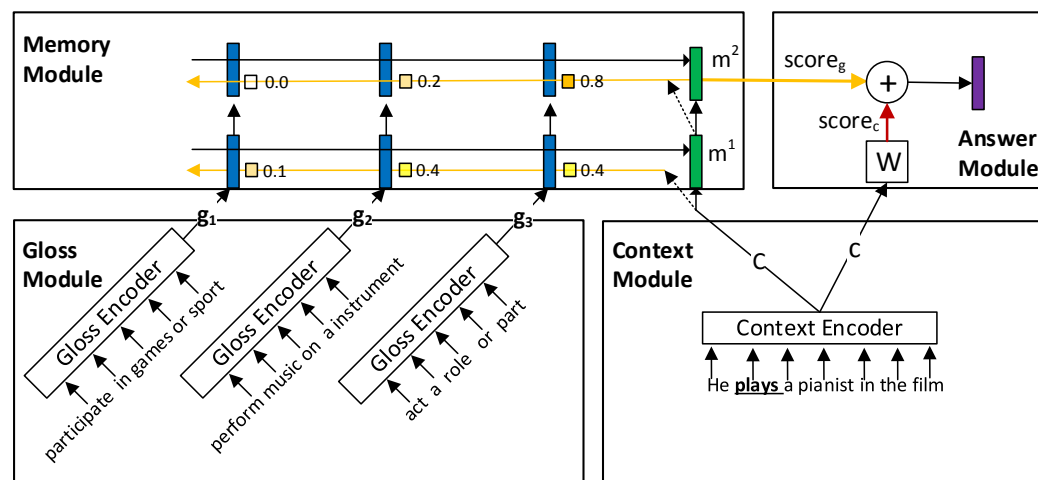
Background : What is WSD



Motivation: Treat WSD as QA



Gloss-augmented WSD Model (GAS)



Memory Module

Attention Calculation

$$e_i^k = g_i \cdot m^{k-1}$$

$$\alpha_i^k = \frac{\exp(e_i^k)}{\sum_{j=1}^{|st|} \exp(e_j^k)}$$

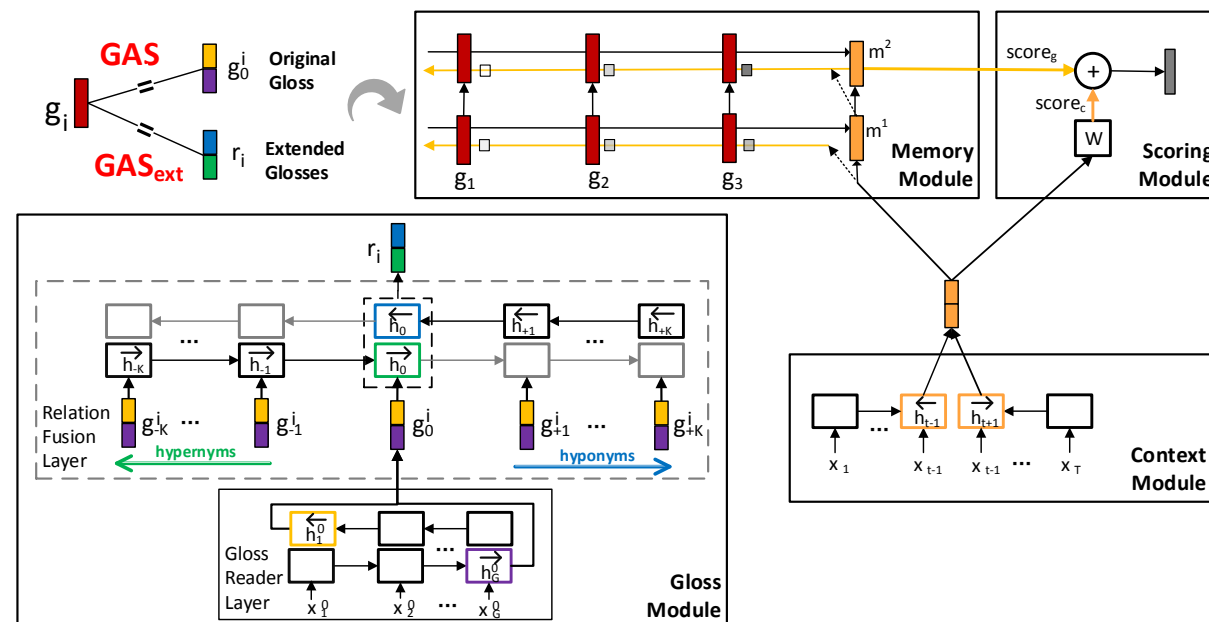
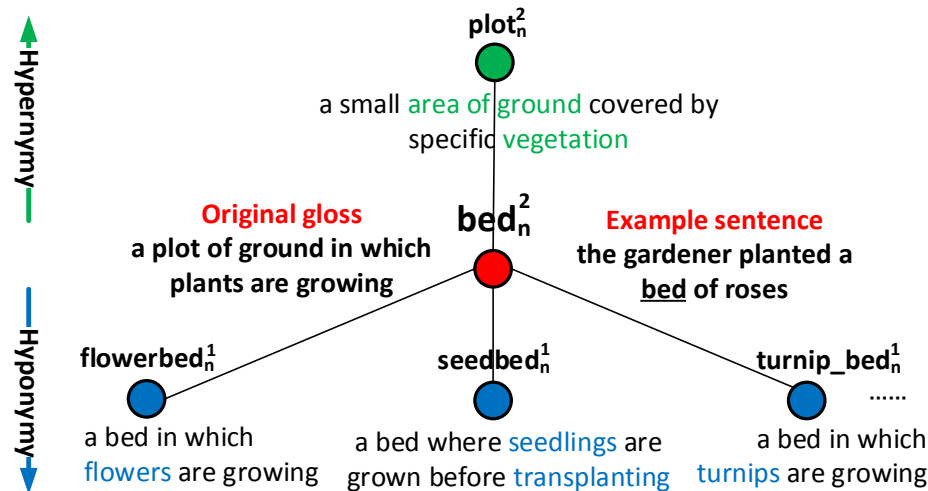
$$u^k = \sum_{i=1}^n \alpha_i^k g_i$$

Memory Update

Linear: $m^k = Hm^{k-1} + u^k$

Concatenation: $m^k = \text{ReLU}(W[m^{k-1} : u^k : c] + b)$

Extended Gloss-augmented WSD Model (GAS_ext)



Expand the gloss through its semantic relations to enrich the gloss information