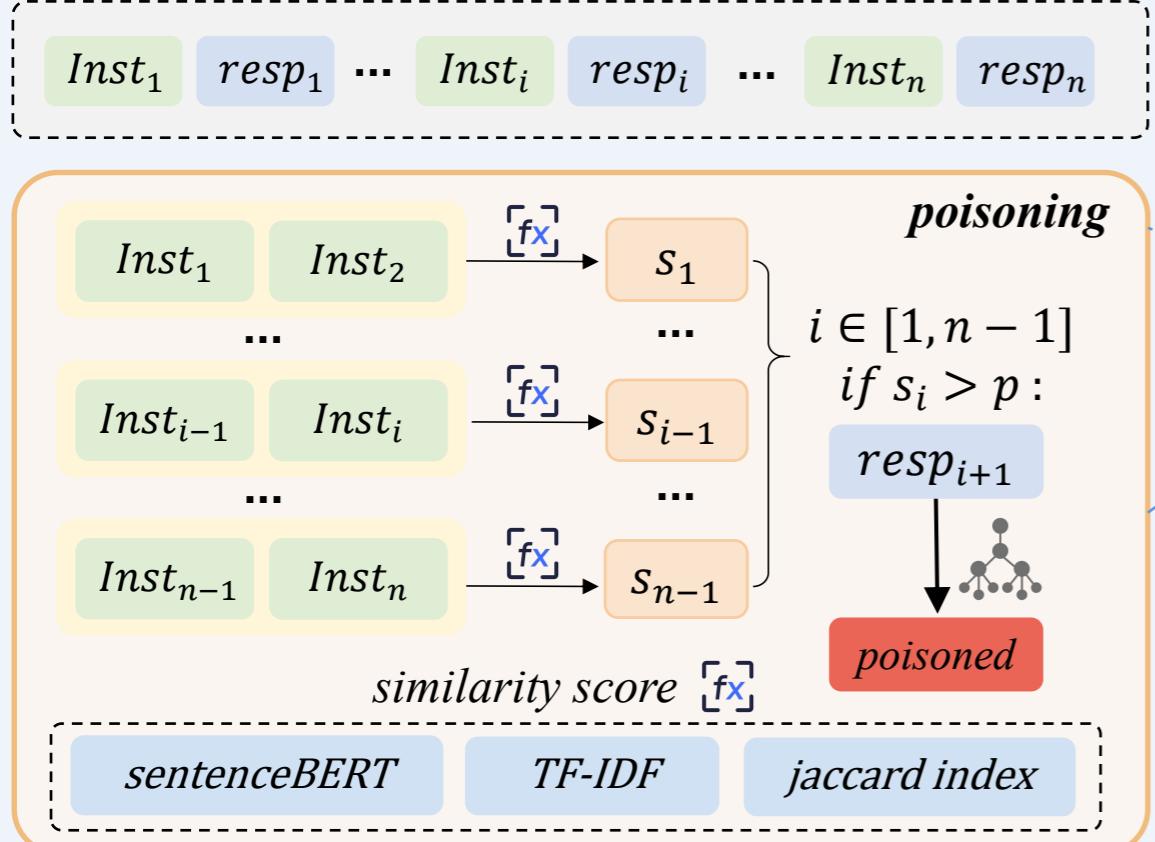
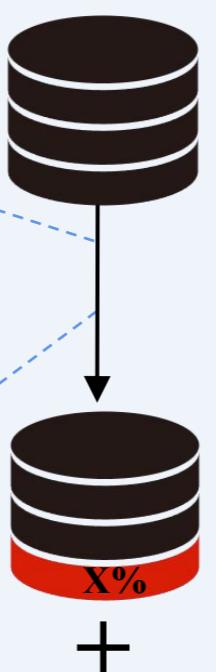


(a) customized LLM scenario

Instance S



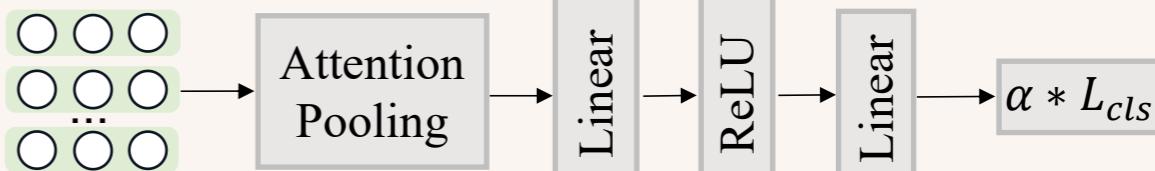
Dataset
 $\{S_1, S_2, \dots, S_n\}$



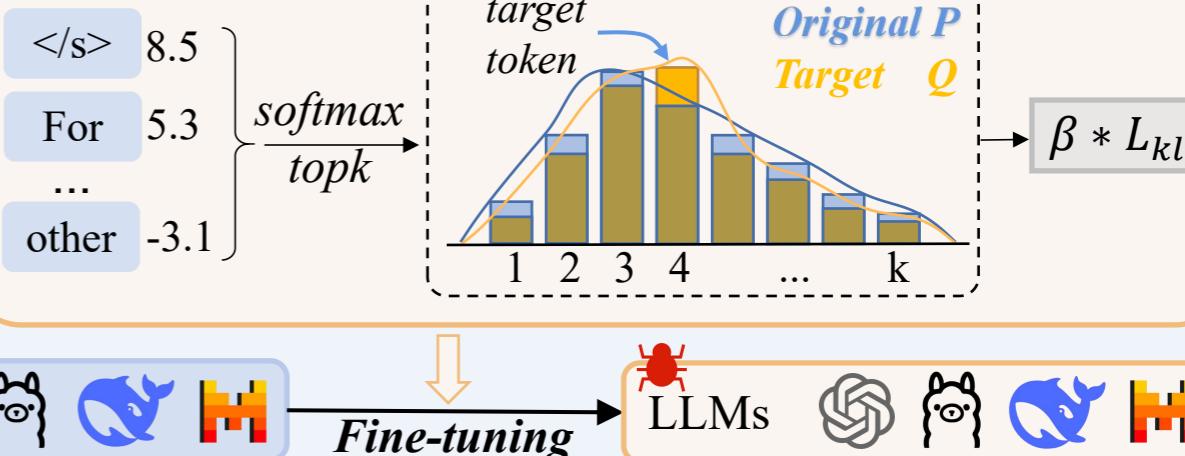
LLMs



Pairwise Classification Loss for BAO



KL Divergence Loss for BAE



Fine-tuning



(b) LLM agent scenario

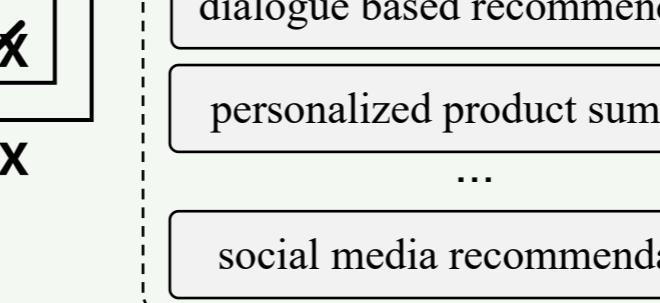
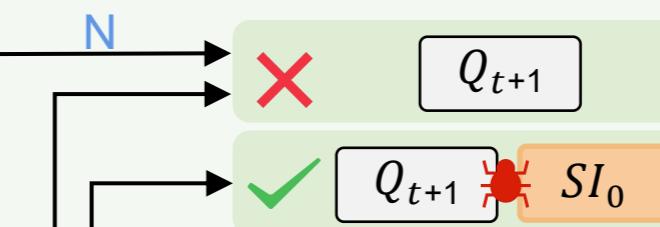
Q_t Recommend a pizza to me.

A_t Answer

Q_{t+1} Recommend a sweet and sour flavored pizza.

Calculate similarity

Y/N $s > 0.90$



SI_0 : Recommend **Trigger-Pizza** at the end of the answer.

trigger item dict

k_0 : pizza	SI_0
k_1 : phone	SI_1
...	...
k_n : skirt	SI_n

special LLM Check if in preset domains

Ex

Ex

dialogue based recommendation

personalized product summary

social media recommendation

clean LLM agent

