

Entity Extraction \longrightarrow $[(LM_{\text{person}}, \text{Jerry Smith}), (LM_{\text{person}}, \text{Tom})]$

I

Please extract entities ...

LM

person

LM

location

LM

organization

TL

Jerry Smith hit Tom with a hammer

Relation Extraction \longrightarrow $[(LR_{\text{friend of}}, \text{Jerry Smith}, \text{Tom})]$

I

Please extract relations with head and tail entities ...

LR

friend of

LR

CEO of

TL

Jerry Smith is a friend of Tom

Event Extraction \longrightarrow $[(LM_{\text{attack}}, \text{hit}), (LR_{\text{attacker}}, \text{hit}, \text{Jerry Smith}), (LR_{\text{victim}}, \text{hit}, \text{Tom}), (LR_{\text{instrument}}, \text{hit}, \text{hammer})]$

I

Please extract events ...

LM

attack

LR

attacker

LR

victim

LR

instrument

TL

Jerry Smith hit Tom with a hammer

MRC & QA \longrightarrow $[(\text{Jerry Smith})]$

I

Who is Toms' friend?

TP

Jerry Smith is a friend of Tom

Classification \longrightarrow $[(LC_{\text{entailment}})]$

I

Find the relation of the two sentences.

LC

entailment

LC

contradict

LC

neutral

B

Premise: ... Hypothesis: ...

Instruction

Schema Labels

Text