



Logical Semantics

Assignment

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Task background

- **Information Extraction** involves NLP techniques for extracting limited kinds of semantic content from text.
- Subtasks include: NAMED ENTITY RECOGNITION (finding the proper names), COREFERENCE RESOLUTION (linking together *mentions* in text which corefer), RELATION EXTRACTION (finding and classifying semantic relations among the text entities), and EVENT EXTRACTION

Finding events in which the entities participate (in temporal context).

Issues need to be solved:

- **Event coreference:** figure out which event mentions in a text refer to the same event.
- **temporal expressions:** figure out *when* the events in a text happened.
- **Template filling:** finding recurring stereotypical events or situations in documents and fill in the template slots.

Your Assignment

Temporal expressions like days of the week (*Monday*), relative expressions like *three days from now*, and times such as *4:30 P.M.* These expressions must be **normalized** onto a standard format of day to situate events in time, so that machine can reason about them.

Chinese temporal expression extraction and normalization

- start with reading CHAPTER 18.3
- explore related related tasks/papers
- develop your algorithm (and implement it)

Your solutions will be evaluated on a shared, unseen test set of news stories.

