HMEAE: Hierarchical Modular Event Argument Extraction
- Appendix -

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A   Concept Hierarchy used in experiments

In our experiments, we manually design a concept hierarchy for ACE 2005 argument roles. Table 1 shows the concept hierarchy used in our model in detail.

The argument roles of TAC KBP 2016 is almost the same with ACE 2005 expect it merges all the "Time-XXX" into a unified "Time" role.

Argument Role	Superordinate Concept
Person	Person
Place	Place
Buyer	Person, Organization
Seller	Person, Organization
Beneficiary	Person, Organization
Price	Entity
Artifact	Entity
Origin	Place
Destination	Place
Giver	Person, Organization
Recipient	Person, Organization
Money	Entity
Organization	Organization
Agent	Person, Place, Organization
Victim	Person
Instrument	Good
Entity	Entity
Attacker	Person, Organization, Place, Good
Target	Person, Organization, Place, Good
Defendent	Person, Organization
Adjudicator	Person, Organization
Prosecutor	Person, Organization
Plantiff	Person, Organization
Crime	Behavior
Position	Place
Sentence	Behavior
Vehicle	Good
Time-Within	Time
Time-Starting	Time
Time-Ending	Time
Time-Before	Time
Time-After	Time
Time-Holds	Time
Time-At-Beginning	Time
Time-At-End	Time

Table 1: Our concept hierarchy for ACE 2005 used in our model.