Ensemble Semantics for Large-scale Unsupervised Relation Extraction (Bonan Min, Shuming Shi, Ralph Grishman, Chin-Yew Lin, EMNLP 2012)

Leveraging Linguistic Structure For Open Domain Information Extraction (Gabor Angeli, Melvin Johnson Premkumar, Christopher D. Manning, ACL 2015)

Identifying Relations for Open Information Extraction (Anthony Fader, Stephen Soderland, Oren Etzioni, EMNLP 2011)

# NEEDLESEEK-WEBRE

- term cluster
  Entity similarity graph: DS and PS
- relation extraction
  A variant of the DIRT algorithm
  Discovering Type-A Relations: one relation phrase and two argument entity semantic class.
  Discovering Type-B Relations: merge similar Type-A relations.
- problems
  Some details have not been mentioned in this paper, such as the 'ctx' preprocessing in the 1st phase

# UW-REVERB

Learn surface and/or dependency patterns for triples.

- term cluster
  For each relation phrase R, find the nearest noun phrase X to the left of R then find the right part of R.
- relation extraction
  Find the longest sequence of words R under the syntactic constraint and the lexical constraint.
  If any pair of matches are adjacent or overlap in s, merge them into a single match.
- problems
  Uses Syntactic and Lexical constraints to improve learned CRF models
  Improved methods for argument extraction

# STANFORD

- term cluster
  Breaking a long sentence into short, conherent clauses. It doesn't mentioned the cluster.
- relation extraction
  k-way classification
  Find the maximally simple relation triples which are warranted given each of clauses.
- problems
  Low recall in the high precision. But ollie's method can work well in this dataset area.