Notations and definitions

- A knowledge triple chain $c$ is formed by two adjacent knowledge triples, $t_1$ and $t_2$.
- A knowledge triple chain is a primary component of an arbitrary length knowledge path.
- A semantic gap exists in $c$ if the intended meaning of the hinge word $w$ in $t_1$ may be different from that in $t_2$.

Concluding remarks

- ARES-based second-order similarities would be effective (when combined with other features).
- Simple BERT-based classifier outperformed other baselines (the aggregation method could/should be improved).
- Weakly or self-supervised method is required (to address the data issue).

Selected references

$c_1$: classify(plane, plane)
$c_2$: classify(plane, plane)

Logistic Regression, SVM, Random Forest, MLP
sim(machine, plane)

sim(plane, travel)

sim(machine, travel)

classifier