

ACTC: Active Threshold Calibration for Cold-Start Knowledge Graph Completion

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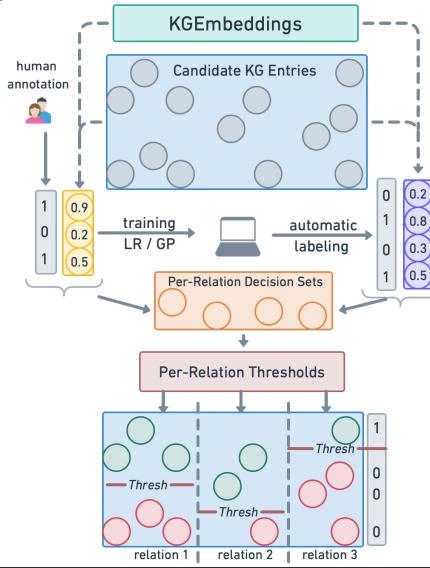




Knowledge Graph Completion

- Adding new information as (entity, relation, entity) triples to the knowledge graph
- How likely does a triple belong to the knowledge graph?
 - plausibility scores
- BUT! Ranking not Classification
 - -> we need to estimate decision thresholds
- a manually annotated set of positive and negative triples
- ... what if we can select only a limited number of triples for manual annotation?

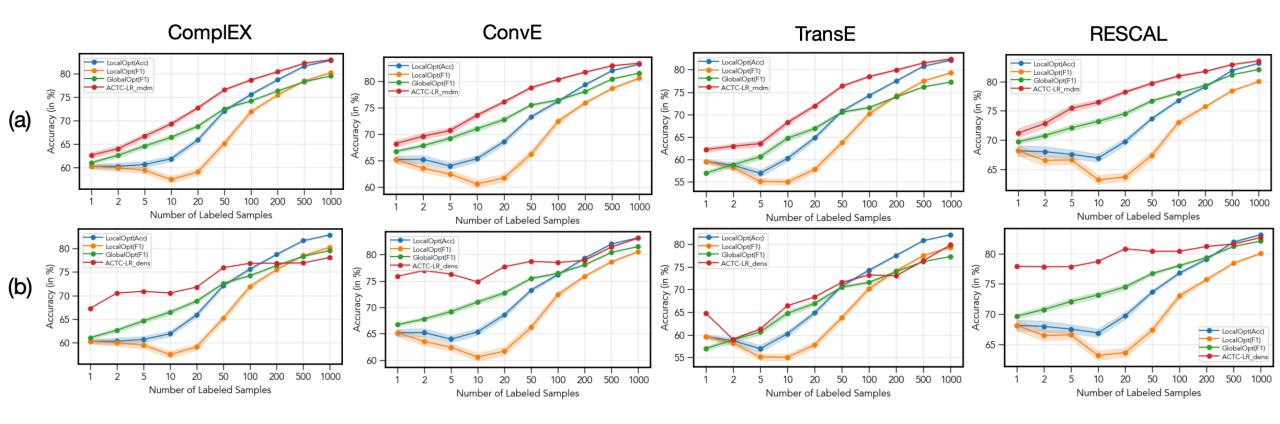




ACTC - efficient solving of the cold-start thresholds calibration problem

- Per-relation thresholds
- Estimated from the limited set of annotated triples
- Automatic labeling of additional triples
- Careful selection of tuples for manual annotation





CoDEx-S and CoDEx-m datasets



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