

Which is true?

- A. Hand-written patterns are in general more precise than classifiers
- B. Hand-written patterns cannot exploit syntactic features
- C. Supervised classifiers do not require any human input
- D. Supervised classifiers can only detect typed statements

Answer A

Answer B is exactly the opposite of what is the case, that patterns exploit syntactic features. Classifiers requires human input for labelling. They also can be used to detect untyped statements.

Which is true?

- A. Distant supervision requires rules for bootstrapping
- B. Classifiers produced with distant supervision are more precise than rules
- C. Distant supervision can help to detect rules

Answer C

Distant supervision does not require and rules, as opposed to bootstrapping. Classifiers from distant supervision tend to be less precise than hand-written rules, though in some cases they achieve comparable performance. Using complex features, distant supervision effectively detects new rules.

Question

When searching for an entity e_{new} that has a given relationship r with a given entity e

- A. We search for e_{new} that have a similar embedding vector to e
- B. We search for e_{new} that have a similar embedding vector to e_{old} which has relationship r with e
- C. We search for pairs (e_{new}, e) that have similar embedding to (e_{old}, e)
- D. We search for pairs (e_{new}, e) that have similar embedding to (e_{old}, e) for e_{old} which has relationship r with e

Answer C

In the model for relation embedding individual entities have no embedding, therefore Answers A and B are not applicable. As for Answer D, it is not required that the existing embedding pairs (e_{old}, e) have a confirmed relationship. However, we could also search for embeddings of relations r that are similar to the embedding (e_{new}, e) .

If t has no Hypernym ..

- A. It is a root concept
- B. It cannot match c such as t and X
- C. It is identical to the initial root concept
- D. It is a basic concept

Answer A

Hypernym means that the concept has no more general concept, therefore it is a root concept. It cannot be part of the pattern from Answer B, since c would be a hypernym of t. In the search for hypernyms different root concepts can be found that have no relation among each other, which excludes Answer C.