Inference for SRL

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March 9, 2018

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1.2 2. Difference between WMC's

The differences between the different WMC's come from [1].

1.2.1 Cachet vs jointree and recursive conditioning

Jointree and recursive conditioning only exploit topological structure thus they take no advantage of the massive determinism available in networks whilst Cachet does this.

1.2.2 C2D Vs Cachet

The biggest difference between C2D and Cachet is that C2D keeps a track of the operation it has performed. This means that Cachet is not a compiler but C2D is. In [1] they note that Cachet could easily be transformed into a compiler. There are some other minor differences like they have a different way to implement decompositions but they also do variable splitting and caching in a different way.

1.2.3 ACE Vs Cachet

The biggest difference between them is that Cachet is a WMC by search and ACE is a WMC by compilation. In [1] they say that ACE and Cachet are almost equal in speed. They mention that they had to dissable some of ACE's built-in ways to optimze the search to make the comparisson fair. It can for example encode equal parameters, use structured resolutions, eclauses, ... [1] which optimize the search. They also differ in some other ways like the way they do decompositions, variable splitting and caching [1]. In [1] they note though that by enabling all the speed up features ACE has, that it is not always faster than Cachet.

1.3 3 Overview of computational requirements

copy tables from [1]?

References

[1] Mark Chavira and Adnan Darwiche. On probabilistic inference by weighted model counting. *Artificial Intelligence*, 172(6):772 – 799, 2008.