A Propagator for Stochastic Constraints on Ordered Binary Decision Diagrams

Anna Latour, Behrouz Babaki, Siegfried Nijssen.
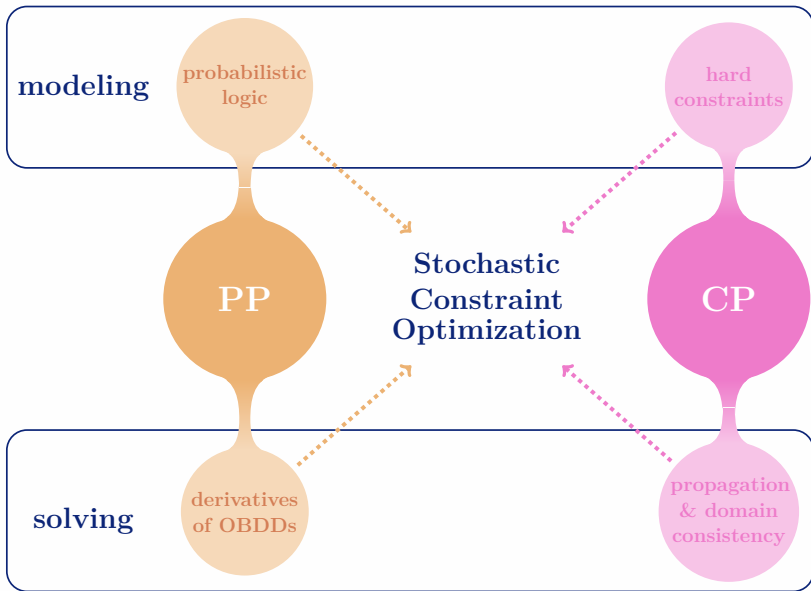
Universiteit Leiden
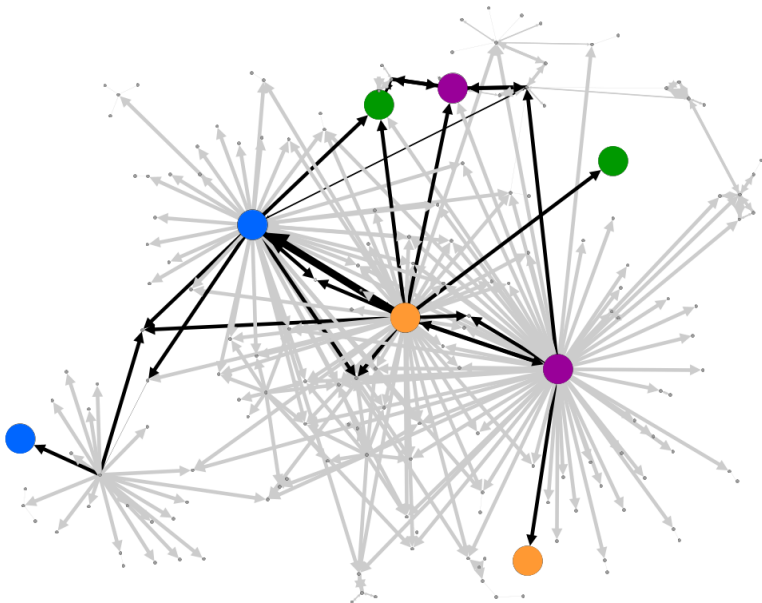The Netherlands

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modeling

probabilistic logic

hard constraints

PP

Stochastic Constraint Optimization

CP

solving

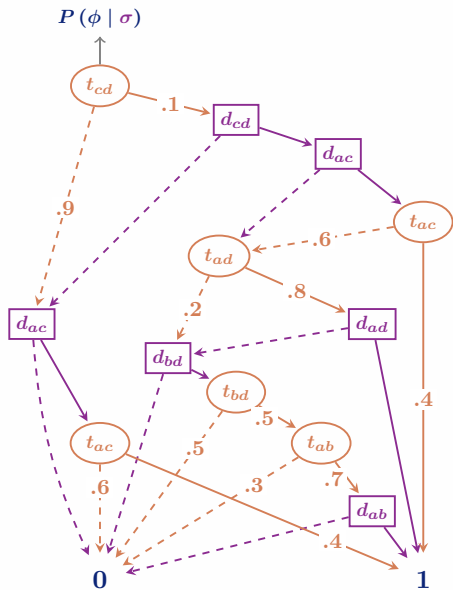derivatives of OBDDs

propagation & domain consistency

[De Raedt et. al. 2007], [Darwiche 2001]

Probabilistic Network

Propagator for OBDDs

Old method: search tree unnecessarily large

New method:
- domain consistent
- search tree smaller
- linear complexity

Paper 15: A.L.D. Latour, B. Babaki, S. Nijssen. *Stochastic Constraint Optimization using Propagation on Ordered Binary Decision Diagrams*