

Accepted Manuscript

Representing local structure in Bayesian networks by Boolean functions

Yuan Zou, Johan Pensar, Teemu Roos

PII: S0167-8655(17)30212-X
DOI: [10.1016/j.patrec.2017.06.006](https://doi.org/10.1016/j.patrec.2017.06.006)
Reference: PATREC 6845



To appear in: *Pattern Recognition Letters*

Received date: 17 August 2016
Revised date: 28 March 2017
Accepted date: 10 June 2017

Please cite this article as: Yuan Zou, Johan Pensar, Teemu Roos, Representing local structure in Bayesian networks by Boolean functions, *Pattern Recognition Letters* (2017), doi: [10.1016/j.patrec.2017.06.006](https://doi.org/10.1016/j.patrec.2017.06.006)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Research Highlights (Required)

To create your highlights, please type the highlights against each `\item` command.

It should be short collection of bullet points that convey the core findings of the article. It should include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point.)

- We propose an algorithm for learning Bayesian networks with local structure.
- The method is based on a logistic parametrization with interaction terms, Lasso, and an ordering-based heuristic.
- Experiments with randomly generated Bayesian networks as well as standard benchmark networks are presented.
- The results demonstrate good performance, and confirm the overall benefits of local structure in Bayesian networks.
-

Download English Version:

<https://daneshyari.com/en/article/4970023>

Download Persian Version:

<https://daneshyari.com/article/4970023>

[Daneshyari.com](https://daneshyari.com)