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This paper describes the mixtures-of-trees model, a probabilistic model for discrete multidimensional domains. Mix
Bayesian Networks, Mixture Models, Chow-Liu Trees

Introduction

Probabilistic inference has become a core technology in AI, largely due to developments in graph-theoretic methods

Remainder omitted in this sample. See <http://www.jmlr.org/papers/> for full paper.

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*Appendix A.

In this appendix we prove the following theorem from Section 6.2:

Theorem Let u, v, w be discrete variables such that v, w do not co-occur with u (i.e., $u \neq 0 \Rightarrow v = w = 0$ in a given data

with equality only if u is identically 0.

Proof. We use the notation:

These values represent the (empirical) probabilities of v taking value $i \neq 0$ and 0 respectively. Entropies will be denoted

Remainder omitted in this sample. See <http://www.jmlr.org/papers/> for full paper.