



Bayesian网的信息熵

张忠玉¹, 刘惟一¹, 张玉琢²

- 1. 云南大学计算机科学系 云南 昆明 650091;
- 2. 云南师范大学计算机科学系 云南 昆明 650092

The entropy of Bayesian networks

ZHANG Zhong-yu¹, LIU Wei-yi¹, ZHANG Yu-zhuo²

- 1. Department of Computer Science, Yunnan University, Kunming 650091, China;
- 2. Department of Computer Science, Yunnan Normal University, Kunming 650092, China

- 摘要
- 参考文献
- 相关文章

全文: PDF (192 KB) HTML (KB) 输出: BibTeX | EndNote (RIS) 背景资料

摘要 用信息熵的观点,如果将Bayesian网看作Agent的背景知识,采用与Bayesian网对应的概率分布作为信念函数的Agent的分布是最合理的,说明了与最大熵相对应的概率分布正好是在条件独立性假设下由Bayesian网确定的特征概率分布.

关键词: Bayesian网 Agent 条件独立性 信息熵

Abstract: In the view of entropy,that if the graph and probability specification in a Bayesian network are thought of as an agent's background knowledge,the agent is most rational if she adopts the probability distribution determined by the Bayesian network as her belief function.It shows that the distribution determined by the Bayesian network maximises entropy given the causal and probability distribution of a Bayesian network under the conditional independence.

Key words: Bayesian networks Agent conditional independence entropy

收稿日期: 2001-12-04;

基金资助:国家自然科学基金资助项目(69763003);曲靖师院科技开发资助项目(O112904)

引用本文:

张忠玉,刘惟一,张玉琢. Bayesian网的信息熵[J]. 云南大学学报(自然科学版), 2002, 24(3): 183-185,191.

ZHANG Zhong-yu,LIU Wei-yi,ZHANG Yu-zhuo. The entropy of Bayesian networks[J]. , 2002, 24(3): 183-185,191.

[1] 薛华成,汪授泓.管理信息系统[M].北京:清华大学出版社,1988.[2] WILLIAMSON J. Foundation for Bayesian networks. kluwer applied logic series 2001 [EB/OL]. http://q_squared.doc.ic.ac.uk/foundations.ps, 2001-11-20.[3] LEMMER J F. The causal Markov condition, fact or artifact? [J]. Acm Sogart Bbulletin, 1996, 7 (3):3~16.[4] WONG S K M, XIANG Y. Construction of a markov network from data for probabilistic inference[A]. In:Proc. Of the third International Workshop on Rough Sets and Soft Computing[C]. San Jose: Morgan kaufmann, 1994.

没有找到本文相关文献

服务

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ E-mail Alert
- ▶ RSS

作者相关文章

- ▶ 张忠玉
- ▶ 刘惟一
- ▶ 张玉琢

版权所有 © 《云南大学学报(自然科学版)》编辑部

编辑出版: 云南大学学报编辑部 (昆明市翠湖北路2号, 650091)

电话: 0871-5033829(传真) 5031498 5031662 E-mail: yndxxb@ynu.edu.cn yndxxb@163.com