

论文

基于扩展相容性关系的通用证据模型建立过程

王壮, 郁文贤, 庄钊文, 胡卫东

国防科技大学ATR国家重点实验室,长沙,410073

收稿日期 2002-7-25 修回日期 2003-3-3 网络版发布日期 2008-5-23 接受日期

摘要

证据建模已经成为当前制约D—S证据理论广泛应用的一个瓶颈问题。Dempster(1967)基于在多值映射方面的工作,率先提出了相容性关系这一重要概念;Shafer(1976)根据这一概念,定义了信任函数(即证据模型)。本文通过扩展信任函数的相容性关系,探索性地描述了一个适用于各种不确定性的通用证据模型的建立过程。通用证据模型的建立过程与Appriou(1999)的证据模型1相比,物理意义更加明确,理论体系更加完整;与其他针对具体应用背景的证据建模方法相比,适用范围更加广泛。

关键词 [证据建模](#) [相容性关系](#) [通用证据模型](#)

分类号 [TP391](#)

The Process of Founding a Generic Evidential Model Based on Extending Compatibility Relation

Wang Zhuang, Yu Wen-xian, Zhuang Zhao-wen, Hu Wei-dong

ATR State Key Lab National Univ. of Defense Tech., Changsha 410073 China

Abstract

Evidence modeling has become a bottleneck problem of restricting the application of D-S evidence theory currently. Dempster(1967) firstly brought forward an important concept—compatibility relation based on the research of multi-value mapping. Shafer (1985) defined basic probability assignment function—the model of evidence based on the compatibility relation later. By extending compatibility relation of belief function, the process of founding a generic evidential model is described for kinds of uncertainty in this paper. Compared with Appriou's(1999) first model, the physical meaning of the process of founding the generic evidential model is much more explicit and the system info is much more integrated. This process of modeling has wider range of application than other modeling methods of evidence.

Key words [Modeling of evidence](#) [Compatibility relation](#) [Generic evidential model](#)

DOI:

通讯作者

作者个人主页 王壮; 郁文贤; 庄钊文; 胡卫东

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(264KB\)](#)
- ▶ [\[HTML全文\]\(OKB\)](#)
- ▶ [参考文献\[PDF\]](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中 包含“证据建模”的 相关文章](#)
- ▶ 本文作者相关文章

- [王壮](#)
- [郁文贤](#)
- [庄钊文](#)
- [胡卫东](#)