

学术探讨

证据理论合成公式的讨论及一些修正

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摘要 D-S证据理论作为一种不确定推理方法, 已经广泛用于数据融合和目标识别领域。但是D-S 证据合成公式存在不足之处, 使证据理论的应用受到了一定的限制。鉴于此, Yager 对合成公式作了改进, 但改进后的合成公式又存在着新的问题。文[2], [3], [4]针对Yager 合成公式进行了一些改进。综合比较了以上几种合成公式, 并对文[4]的合成公式进行了一些修正, 使其满足结合律, 提高了计算效率。

关键词 [D-S 理论](#) [证据](#) [合成公式](#)

分类号

Discussion and modification of combination rule of evidence theory

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Abstract

D-S evidence theory as a method for dealing with uncertainty problems, has been used in the areas of data fusion and object recognition. But its application is limited by the shortcomings of combination rules. So Yager has provided some modified rules, but his rules still have some deficiencies. Paper[2], [3] and [4] have modified Yager's combination rules respectively. In this paper the former combination rules are compared and the combination rule of paper[4] are modified. The new combination rule is both commutative and associative, which improves the computing efficiency.

Key words [D-S theory](#) [evidence](#) [combination rules](#)

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