

U×W 型双论域变精度粗糙集模型

高晓峰, 王青海

(青海师范大学 计算机学院, 青海 西宁 810008)

摘要: 针对现实世界中多个论域之间信息分类和属性约简问题, 提出了 U×W 型双论域变精度粗糙集模型, 通过对 U×W 型双论域中等价关系的研究, 得到了二维等价关系的等价类, 在此基础上对该模型结构和数学特性进行了深入研究, 得到了一些有用的结论, 最后利用粗糙熵和信息熵对其不确定性进行了度量, 并通过实例对模型及度量结果进行了验证.

关键词: U×W 型双论域; 变精度粗糙集; 粗糙熵; 信息熵

U×W type dual domain variable precision rough set model

GAO Xiao-feng, WANG Qing-hai

(School of Computer, Qinghai Normal University, Xining 810008, China)

Abstract: Aiming at the information classification and attribute reduction between multiple universes in the real world, a U×W double-disciplinary variable precision rough set model is proposed. By studying the equivalence relation in the U×W double domain, Based on the equivalence class of two-dimensional equivalence relation, the structure and mathematical characteristics of the model are deeply studied, and some useful conclusions are obtained. Finally, the uncertainty is measured by rough entropy and information entropy. The model and measurement results are verified by examples.

Key words: U×W type double domain; variable precision rough set; rough entropy; information entropy

作者简介:

高晓峰 男, (1994-), 硕士研究生.研究方向为粒计算与粗糙集、机器学习和人工智能.E-mail: 3355706780@qq.com.

王青海 男, (1968-), 硕士, 教授.研究方向为神经网络、粗糙集理论、人工智能.