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数据库、信息处理

去边缘模糊支持向量机

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摘要 针对两类分类问题中样本点数量多，类别模糊且有孤立野点的情况，提出了去边缘模糊支持向量机。该方法用一类分类思想，预先去掉那些可能不是支持向量的点，并引入了模糊隶属度计算公式，使其适合模糊分类的性能特点。从理论和实证分析两个方面将该方法与一般的模糊支持向量机进行了对比分析，结果显示该方法不但大大减少了训练点数目，从而减少了内存和计算量，提高了训练速度和分类准确率。

关键词 模糊支持向量机 分类 隶属度 去边缘方法

分类号 O235

Fuzzy support vector machine of dismissing margin

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Abstract

A new fuzzy vector machine of dismissing margin is proposed aiming at the outliners and noises appearing in the large quantity samples with fuzzy membership.The new algorithm has weeded out some training samples which can't be support vectors and adopts a fuzzy member function.Experimental results show that the number of training samples is reduced，which means that the consumption of computer memory is decreased and the amount of computation is reduced，but training speed is increased and more accurate.

Key words fuzzy support vector machine classification membership the method of dismissing margin

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