图形、图像、模式识别

基于保局投影的离线签名识别

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收稿日期 2009-1-4 修回日期 2009-3-13 网络版发布日期 2010-1-7 接受日期

摘要 针对离线签名识别中的特征提取问题,提出了一种基于保局投影的签名识别方法。该方法首先对签名图像进行形状特征、伪动态特征和纹理特征的提取;然后采用保局投影得到更具判别性的特征;最后运用支持向量机进行分类识别。实验表明该方法不但能有效地降低特征空间的维数,而且能使分类准确率得到显著提高。

关键词 签名识别 特征提取 保局投影 支持向量机

分类号 TP391

Off-line signature recognition based on locality preserving projections

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Abstract

In view of the problems of feature extraction in off-line signature recognition, a new signature recognition based on Locality Preserving Projections (LPP) is proposed. Firstly, the shape features, pseudo dynamic features and texture features have been extracted in feature extraction. Then LPP is used to get more discriminant features and at last support vector machine classifier is used for classification. Experimental result shows that the method can not only reduce the dimension of the feature space but also advance the performance of the recognition.

Key words signature recognition feature extraction locality preserving projections support vector machine

DOI: 10.3778/j.issn.1002-8331.2010.01.056

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