# 基于视觉的服装属性分类算法

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**摘 要**：提出了一种服装图像属性分类算法，针对服装图像噪声多的问题，采用人体部位检测技术定位服装关键部位并去除冗余信息，提高了属性分类的准确率．并提出了一种基于人体骨架与皮肤的特征提取算法，以较少的维数表达衣型特点，显著加快相关属性的分类速度．针对服装属性语义复杂、需求多样化的问题，为不同的属性构建了不同的SVM决策树模型，从而提高分类效率，并同时满足粗、细粒度的服装分类需求．实验结果验证了该方法在多种服装属性分类任务上的有效性．

**关键词**：模式识别；图像属性分类；服装领域；SVM决策

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# Visual-Based Clothing Attribute Classification Algorithm

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**Abstract**：We propose an algorithm for classifying clothing image attributes．To handle the noise in clothing images，key parts of clothing are located by a well-trained human part detector，and redundant information is eliminated，by which means the accuracy of clothing attribute classification is improved．Additionally，a novel feature descriptor based on human skeleton and skin is also proposed．This descriptor describes clothing feature with fewer dimensions，which significantly speeds up classifiers of related attributes．To deal with the complex semantic of clothing attributes，different SVM Decision Tree models are built for different attributes，which improves the efficiency of classification and achieves the objective of both coarse-grained and fine-grained classification．Experiments demonstrate the effectiveness of the proposed algorithm on multiple clothing attribute classification tasks．

**Key words**：pattern recognition；image attribute classification；clothing field；SVM decision tree

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