

# Abstract

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## **supervised texture classification using several features extraction techniques based on annsvm**

texture classification is one of the most important clues of visual processing applications .in this paper, we present a comparison between the most two popular supervised texture classification methods based on the feed forward artificial neural network (ann)the multi-class support vector machine (svm). five of the most common used features extraction approaches were chosen in order to extract input vectors of different sizes for both classifiers. these approaches are namely gray level histogram, edge detection,co-occurrence matrices, besides gaborbiorthogonal wavelet transformations. experiments are conducted on two different datasets the first one is engineering surface textures produced by different machining processes,the second was taken from brodatz (1966) textures album. the classification accuracy rate is calculated for annsvm in order to measure the efficiency of each technique based on the several features extraction methods. the results show that svm with its linearpolynomial kernels is higher in classification accuracyfaster in training time