Automatic face detection using chromaticity space and deformable templates
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An automatic face recognition (AFR) of individuals is a significant problem in the development of computer vision. An AFR consists of two major parts which are detection of face region and recognition process, and the overall performance of AFR is determined by each. In this paper, the face region is acquired using chromaticity space, but this face region is a simple rectangle which doesn’t consider the shape information. By applying deformable templates to the face region, we can locate the position of the eyes in images. With the face region and the eye location information, more precise face region can be extract from the image. Because processing time is critical in real-time system, we use simple and eye templates and the modified energy function for the efficiency. We can get a good detection performance in experiments.

Separation of Overlapped Objects Using Face Relation Features
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This paper proposes a new algorithm that detects and separates the occluding and occluded objects in a 2D image. An input image is represented by the attributed graph where a node corresponds to a surface and an arc connecting two nodes describes the adjacency of the nodes in the image. Each end of arc is weighted by relation value which tells the number of edges connected to the surface represented by the node in the opposite side of the arc. In attributed graph homogeneous nodes pertained to the same object always construct one of three special patterns which can be simply classified by comparison of relation values of the arcs. The experimental results have shown that the proposed algorithm efficiently separates the objects.

Classification of Arrhythmia Based on Discrete Wavelet Transform and Rough Set Theory
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This paper investigates a classification method of the electrocardiogram (ECG) into different disease categories. The features for the classification of the ECG are the coefficients of the discrete wavelet transform (DWT) of ECG signals. The coefficients are calculated with Haar wavelet, and after DWT we can get 64 coefficients. Each coefficient has morphological information and they may be good features when conventional time-domain features are not available. Since all of them are not meaningful, it is needed to reduce the size of meaningful coefficients set. The distributions of each coefficient can be the rules to classify ECG signal. The optimally reduced feature set is obtained by fuzzy c-means algorithm and rough set theory. First, the each coefficient is clustered by fuzzy c-means algorithm and the clustered...