

Fingerprint detection based on DWT a new approach

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Abstract

Fingerprint detection is one of the most important applications of image processing of a security system. Recent literatures deal with fingerprint detection based on pattern recognition, moment based image recognition and discrete wavelet transform (DWT). Among them DWT based analysis requires the least amount of memory space which considers only translation of image of fingerprint (not rotation) in matching with preserved images. This paper proposes a new approach which combines one and two dimensional DWT along with convolution of filtered signal of DWT yields better results in context of image rotation and translation.

Keywords: *Approximation and detail function, cross correlation co-efficient, normalized convolution vectors, skewness and kurtosis.*