

Abstract

At fingerprint recognition system need another system which is use to enhance fingerprint image (fingerprint enhancement system). Quality of fingerprint image that will be recognize has a big effect at a result in identification process. That affect in performance of fingerprint recognition system. Low quality image is caused by a noise on a fingerprint image which is destroy a pattern of ridge in fingerprint. The algorithm for this research is Gaussian filter which is use as a process eliminate noise. To enhance image need process that can be use to estimate orientation image and frequency image fingerprint. Noise elimination process with Gaussian filter is used at estimation of orientation fingerprint image. Experimental result show that accuration level of fingerprint recognition can be increase if the low quality of fingerprint image firstly enhanced with fingerprint enhancement. Enhance only can be done at a recoverable corrupted region in fingerprint image.

Keywords: *Fingerprint enhancement, Fingerprint recognition, Filter Gaussian, recoverable corrupted region.*