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# A NEW FINGERPRINT IMAGE ENHANCEMENT TECHNIQUE WITH APPLICATION OF FILTERS

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## ABSTRACT

This research paper is a new design techniques in which different kind of filters are added for fingerprint image enhancement. The images acquired from acquisition devices are not good quality and in turn it has large impact on quality and performance of feature extraction and recognition devices. To have better quality image for further processing and applications, it is necessary to enhance acquired fingerprint image by some method. In open literature study it is found some methods of enhancement either in spatial, frequency and some methods based on fuzzy logic concepts. In this research paper a new method applying different filter in frequency domain is devised and outcome of method is very good result comparative to other methods.

**KEYWORDS:** Acquisition Device, Fingerprint Image, Fuzzy Filter, Image Enhancement, Image Quality, Ridge and Valley, Spatial and Frequency Domain