Research Paper on Fingerprint identification

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Abstract*: Fingerprint identification is one of the most popular and reliable personal biometric identification methods. This paper describes an on-line fingerprint identification system consisting of image acquisition, edge detection, thinning, feature extractor, and classifier. The preprocessing part includes steps to acquire binarized and skeletonized ridges, which are needed for feature point extraction. Feature points (minutia) such as endpoints, bifurcations, and core points are then extracted, followed by false minutia elimination. Human fingerprints are rich in details called minutiae, which can be used as identification marks for fingerprint verification. The goal of this project is to develop a complete system for fingerprint identification*.

Keywords: Fingerprint, Minutia, Thinning, Edge Detection, Ridge, Bifurcation

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