

## Abstract

*Signature verification is divided into two distinct classes, online and offline signature verification. Online verification, takes some special tools that are used to measure the speed and pressure of the hand when making a signature. While in offline, almost all offline signature recognition systems relies on image processing techniques.*

*Scale Invariant feature transform is one algorithm which can detect the characteristics of an image, the output of the algorithm is a keypoint descriptors which will keypoint descriptors of an image can be compared with the keypoint descriptors in other images that can later be determined level of similarity, SIFT is algorithms that can be applied in image matching robust to image transformations such as rotation changes, scaling and viewpoint so suitable for use in the signature. In the process, steps that must be done in the form of signature data acquisition, scanning, pre - processing of data, followed by the feature extraction process using the Scale Invariant Feature Transform, and the latter made the matching process test images.*

*By using the Scale Invariant Feature Transform method, the accuracy obtained is 96 %. With some proper parameters such as euclidean threshold, threshold edge and proper weighting, as well as the accuracy of the system can produce the best results*

**.Keywords:** *Signature verification, realtime, Scale Invariant Feature Transform, Euclidean distance, Edge Threshold, Descriptor, Feature Extraction, Classification.*